EXR-18/XR-3200/3201/3202

SERVICE MANUAL

US Model
EXR-18/XR-3200
Canadian Model
XR-3200
AEP Model
XR-3200/3201
UK Model
XR-3201
German Model
XR-3202

Photo :

Model Name Using Similar Mechanism	XR-3050/3051/3052
Tape Transport Mechanism Type	MG-707DV-35

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
7 Watts per channel minimum continuous average power into 4 ohms, 4 channels driven, from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

Other Specifications

Power amplifier section

Outputs	Speaker output
Speaker impedance	4 – 8 ohms
Maximum power output	7W × 4 (at 4 ohm)* (*Measured at 14.4V)

Cassette player section

Tape track	4-track 2-channel stereo
Frequency response	30 - 15,000 Hz
Signal-to-noise ratio	55 dB
Wow and flutter	0.13% (WRMS)

Tuner section

FM

Tuning range	87.5—107.9MHz (US, Canadian) 87.5—108.0MHz (AEP, UK, German)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf (75 ohms)
Selectivity	70 dB a 400 kHz
Signal-to-noise ratio	68 dB (mono)
Harmonic distortion at	1 kHz 0.4% (mono)
Separation	28 dB at 1kHz
Frequency response	30 - 15,000 Hz
capture ratio	3 dB (US, Canadian) 5 dB (AEP, UK, German)

—Continued on next page—

FM/AM CASSETTE CAR STEREO
EXR-18/XR-3200/3202

FM/MW/LW CASSETTE CAR STEREO
XR-3201

SONY®

MICROFILM

This section is extracted from instruction manual.

AM (MW/LW)

Tuning range	530—1,710kHz (US, Canadian) 531—1,602kHz (XR-3200 : AEP/3202) MW : 531—1,602kHz LW : 153—281kHz (XR-3201)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	35μV (EXCEPT XR-3201) MW : 35μV LW : 70μV (XR-3201)

General

Output lead	Power antenna relay control lead
tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
loudness	+10 dB at 100 Hz +8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 186 × 57 × 175 mm (w/h/d), not incl. projecting parts and controls
Mounting dimensions	Approx. 182 × 53 × 150 mm (w/h/d), not incl. projecting parts and controls
Mass	Approx. 1.4 kg
Accessories supplied	Mounting hardware (1 set) Front panel case (1)

Design and specifications subject to change without notice.

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Features

General

- **Detachable-front panel** enables you to take the front panel away with you when you leave your car (page 9).

Cassette player section

- **ATA (Automatic tuner Activation)** for automatically turning on the tuner during the fast-forwarding or rewinding of a tape (page 8).

Tuner section

- **PLL synthesizer tuner**
- **Up to 18 stations can be preset, 12 stations on** FM, 6 stations on AM (EXCEPT XR-3201) (page 13).
- **Up to 24 stations can be preset, 12 stations on FM, 6 stations each on MW and LW (XR-3201) (page 13).**
- **A.MEM (Auto Memory) function** automatically selects and stores the stations with strong signals on the preset number buttons in order of frequency (page 12).
- **The traffic announcement stand-by function (SDK)** for automatically starting the traffic announcement broadcasts while listening to another radio program (FM band only) or tape playback (XR-3202) (page 15)

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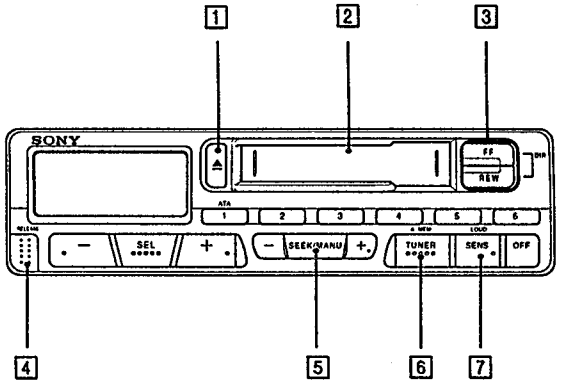
Location and Function of Controls



Refer to the pages in ● for details.

1 **▲(eject button)**
Press to stop tape playback and to eject the cassette.

2 **Cassette insertion door**

3 **FF/REW (fast winding)/DIR (tape transport direction change) buttons** ⑩
During playback, press FF or REW for fast winding or press both FF and REW simultaneously to listen to the other side of the cassette.

4 **RELEASE (front panel release) button** ⑨

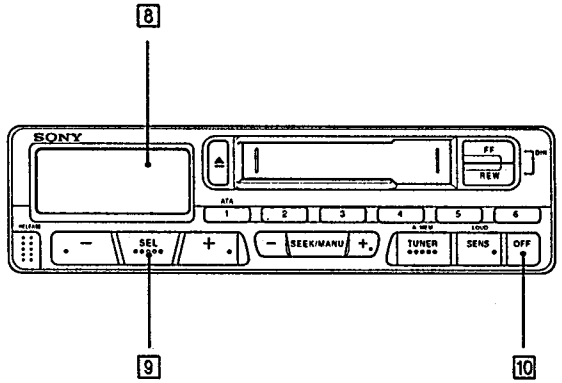
5 **SEEK/MANU (automatic tuning/manual tuning) button** ⑪

6 **TUNER (radio on/band select) button** ⑪
Each time the button is pressed, the band changes in order of:

→ FM1 → FM2 → AM →
(XR-3200)

→ FM1 → FM2 → MW → LW →
(XR-3201)

7 **SENS/LOUD (Sensitivity/loudness)** ⑪
Press for more than two seconds to reinforce the bass and treble especially when listening at a low volume level. To disengage the button, press it again for more than two seconds (loudness function).



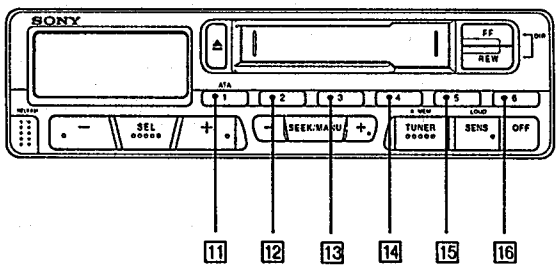
8 **Display window**

9 **[−] [SEL] [+] button**
Normally, the [−] or [+] buttons are pressed to control the volume. Pressing the SEL button changes the mode as follows:
→ BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader) → VOL (volume) →
Press the [−] or [+] buttons (to adjust the level) within three seconds, or the volume mode will return.

Display window	[SEL] Control mode	[−] Press [−]	[+] Press [+]
Flash 0 7 (BAS, TRE)	Bass control	For less bass	For more bass
Flash −7 0 (BAS, TRE)	Treble control	For less treble	For more treble
BALANCE 0 0 (L, R)	Balance control	To decrease the right-speakers' volume	To decrease the left-speakers' volume
FADER 0 0 (F, R)	Fader control	To decrease the rear-speakers' volume	To decrease the front-speakers' volume
40	Volume control	For less volume	For more volume

10 **OFF (power off) button**
Press to turn off the radio.

This section is extracted from XR-3200/3201's instruction manual.

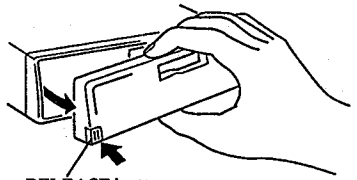


	During tape playback	During radio reception
11	**ATA (Automatic Tuner Activation) button** Press to make the tuner turn on automatically every time you fast-wind a tape. To cancel, press it once more.	**Preset number buttons** ⓭ ⓮
12	—	
13	—	
14	—	
15	—	
16	—	

Detaching and Attaching the Front Panel

Detaching the Front Panel

Before detaching the front panel, be sure to press the OFF button first. Then press the RELEASE button to open up the front panel, and detach the panel by pulling it towards you as illustrated.

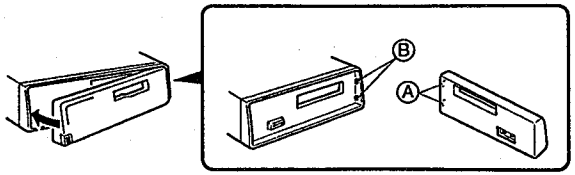


RELEASE button

Do not drop the panel when detaching it from the unit.

Attaching the Front Panel

Apply the right hand side of the front panel to the unit by attaching part Ⓐ of the front panel to part Ⓑ of the unit as illustrated and push until it clicks.

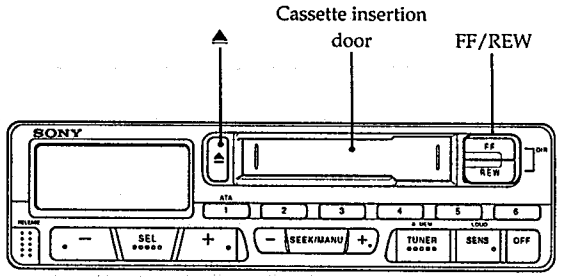


Do not press hard or apply excessive pressure to the display window of the front panel.

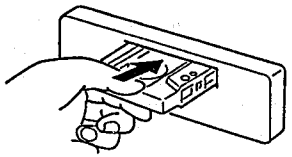
Notes

- Make sure that the front panel is the right way up when attaching it to the unit. It cannot be attached upside down.
- When attaching the front panel, do not press it hard against the unit. It can be easily attached by pressing lightly.
- Never leave the detached front panel in your car if it is parked in direct sunlight. There could be a considerable rise in temperature inside the car.
- When you carry the front panel with you put it in the supplied front panel case.
- The display window may become warm while the unit is operated. This is not a sign of a malfunction.

Listening to the Tape Playback



Insert a cassette to start playback.
Playback starts automatically.



To listen to the reverse side of the cassette.

Press FF and REW simultaneously.

To Eject the Cassette and Listen to the Radio

Press the ▲ button.

To Wind the Tape Rapidly

Direction indicator	To advance	To rewind
	Press FF.	Press REW.
	Press FF.	Press REW.

To resume playback, press FF or REW so as not to depress it.

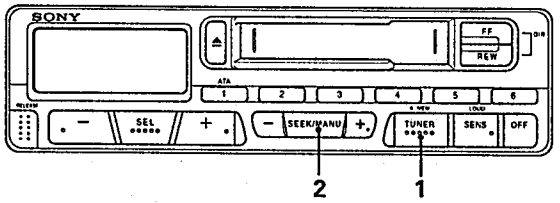
Note
Before turning off the unit; eject the tape to avoid tape damage.

Tape transport direction indication.

The side facing up is being played.

The side facing down is being played.

Tuning in a Station



Searching for the Stations Automatically
— Automatic Tuning

1 Select the desired band.

2 Press either side of the SEEK/MANU button lightly.

For lower frequencies **For higher frequencies**

The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

Tuning in by Adjusting the Frequency
— Manual Tuning

Select the desired band, then press and hold either side of the SEEK/MANU button.

For lower frequencies **For higher frequencies**

Release the button when the desired station is received.
At least two seconds after releasing the button, the system will return to Automatic Tuning.

PREVENTING ACCIDENTS!

While you are driving' the use of the Automatic Tuning and the Memory Preset Tuning is recommended instead of the Manual Tuning.

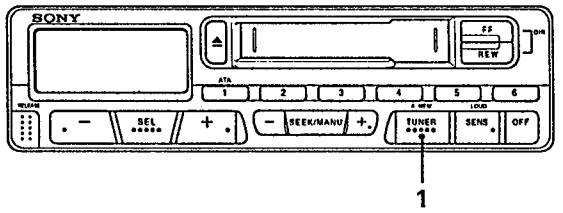
Note
Make sure that you press either side of the SEEK button lightly. If you keep it pressed, the button will function as the manual tuning button.

When an FM stereo program with a sufficient signal strength is tuned in

The "STEREO" indication will appear.

Avoiding the automatic tuning from stopping on stations too frequently (Local Seek Mode)
Press the SENS button lightly to get the "LOCAL" indication. Only the stations with relatively strong signals can be tuned in. The local seek mode functions only when the Automatic Tuning is in operation.

Using the Memory Preset Function



Stations with clearest reception are automatically searched and memorized on each band (FM1, FM2, MW and LW) - (XR-3201), (FM1, FM2 and AM) - (XR-3200). Up to 6 stations on each band can be stored on the preset number buttons 1 to 6 in the order of frequency.

Memorizing the Stations Automatically

— A.MEM (Auto Memory) Function

1 Select the desired band.

2 Press the A.MEM button for more than two seconds.

The receivable frequencies of FM1and FM2 are the same. Therefore, 12 stations can be memorized on FM.

The A.MEM function

The A.MEM function searches all the receivable stations within the currently selected band and memorizes the ones in good receiving conditions in sequence from the frequency at present.

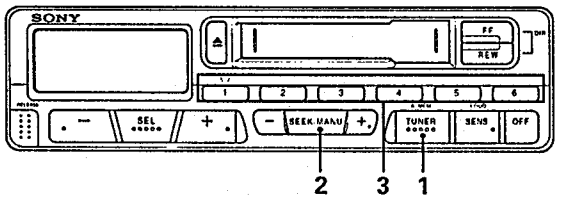
How to memorize the stations on the preset number buttons

— When there is no preset number indicated on the display window, all the preset number buttons set in the currently selected band will be filled with the memories.

— When there is a preset number indicated on the display window, the unit will memorize the stations on the preset number buttons from the one currently being displayed. For example, when you choose FM1 and preset number 3 is being displayed, the operation will start from the preset number 3 on FM1 and stops at the preset number 6 on FM2

Note

There may be cases where there are not enough receivable stations due to the lack of stations in the vicinity or weak broadcasting signals. In such cases, the A.MEM operation may stop without all the buttons being occupied with memories.



Up to 6 stations on each band (FM1, FM2, MW and LW) - (XR-3201), (FM1, FM2 and AM) - (XR-3200) can be stored in the memory in order of your choice.

Memorizing Only the Desired Stations

For example, store a station on the preset number button 1.

1 Select the desired band.

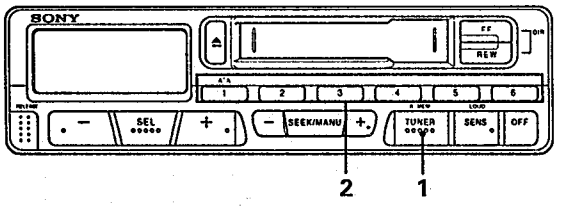
2 Tune in the station which you wish to store on the preset number button (page 11).

3 Keep the preset number button pressed for about two seconds until the frequency flashes in the display window. The sound becomes mute.

Repeat the same procedure to store other stations.

Only one station per band (FM1, FM2, MW and LW) - (XR-3201), (FM1, FM2 and AM) - (XR-3200) can be stored in the memory on each preset number button.
If you try to store another station on the same preset number button, the previously stored station will be erased.

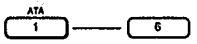
Using the Memory Preset Function



Receiving the Memorized Stations

1 Select the desired band.

2 Press the desired preset number button lightly.



Notes

- There may be cases in which even the stations stored in the memory cannot be received due to weak signals in the vicinity of your car.
- If you keep pressing the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, press the preset number button only lightly.

Maintenance

Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction.

Warning

Use only a fuse with the specified amperage. Use of a higher amperage fuse may cause serious damage.

Cleaning the Head and the Tape Path

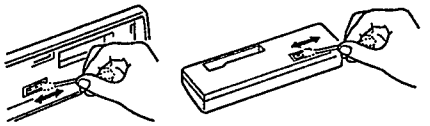
Prolonged use may contaminate the tape head and the tape path. Contamination causes sound drop-outs during playback.

Clean the tape head and the tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

Cleaning the Connectors

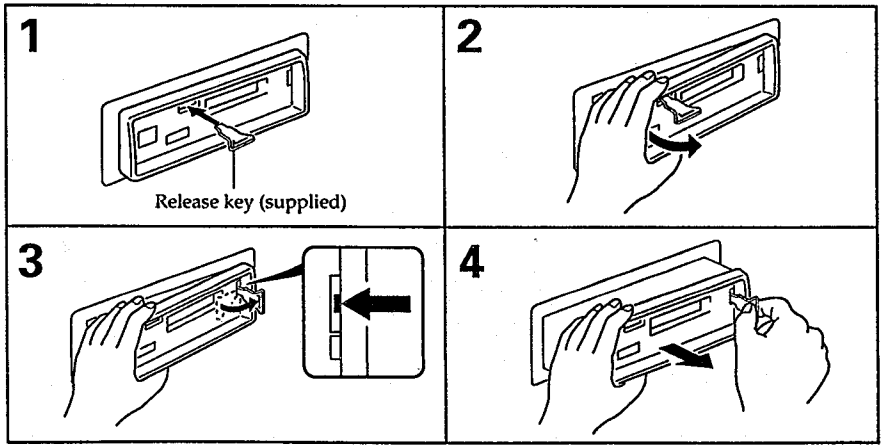
The unit may not function properly if the connectors between the unit and the front panel get contaminated. In order to prevent this, open up the front panel by pressing the RELEASE button, detach it and clean the connectors from time to time.

Clean the connectors with a cotton swab as illustrated. Be sure to clean them in the direction of the arrow.



Main unit — Back of the front panel

Dismounting the unit



Installation Installation Inbouwen

Precautions

- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt, or excessive vibration.
- Use only the supplied mounting hardware for a safe and secure installation.
- Be sure to detach the front panel before you start installing the unit.

Mounting angle adjustment
Adjust the mounting angle to less than 20°.

Précautions

- Choisir l'emplacement de montage avec soin de manière que l'appareil ne gêne pas les mouvements du conducteur.
- Eviter d'installer l'appareil en plein soleil, près d'une source de chaleur comme un chauffage ou dans un endroit exposé à la poussière, la saleté ou des vibrations excessives.
- Afin de garantir un montage sûr, utiliser uniquement le matériel de montage fourni.
- Veiller à détacher le panneau avant d'installer l'appareil.

Réglage de l'angle de montage
Ajuster l'inclinaison à un angle inférieur à 20°.

Voorzorgsmaatregelen

- Kies met overleg een plaats voor het apparaat. Let er goed op dat de bestuurder bij het rijden geen hinder van het apparaat ondervindt.
- Monteer het apparaat niet op een plaats waar dit blootgesteld staat aan hoge temperaturen (direct zonlicht, in de buurt van een warmeluchtrooster van de verwarming e.d.). Vermijd ook stoffige en vuile plaatsen alsmede plaatsen waar het apparaat blootgesteld staat aan trillingen.
- Gebruik uitsluitend het bijgeleverde montage-materiaal voor het inbouwen van het apparaat.
- Verwijder het voorpaneel alvorens u het apparaat inbouwt.

Toelaatbare inbouwhoek
De inbouwhoek moet minder dan 20° zijn.

How to Detach and Attach the Front Panel

To detach
Press the RELEASE button to open the front panel, then pull it out.
To attach
Align parts Ⓐ and Ⓑ, and push the front panel until it clicks.

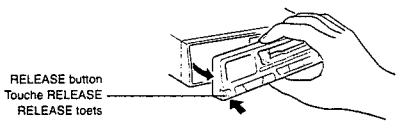
Dépose et pose du panneau avant

Dépose
Appuyer sur la touche RELEASE avant d'ouvrir le panneau avant, puis le tirer vers vous.
Pose
Aligner le pièces Ⓐ et Ⓑ et pousser le panneau avant jusqu'à enclenchement.

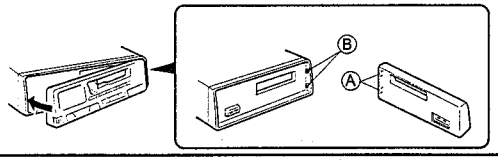
Verwijderen en weer aanbrengen van het voorpaneel

Verwijderen
Druk op de RELEASE toets zodat het voorpaneel ontgrendeld wordt en verwijder dit vervolgens van het apparaat.
Aanbrengen
Zorg dat punt Ⓐ en punt Ⓑ tegenover elkaar liggen en druk het voorpaneel dan aan, totdat dit vastklikt.

To detach
Dépose du panneau avant
Verwijderen van het voorpaneel



To attach
Pose du panneau avant
Aanbrengen van het voorpaneel



Mounting Example

Installation in the dashboard

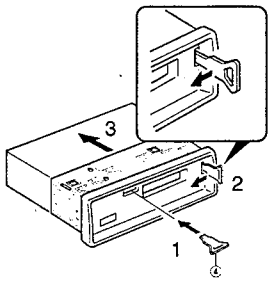
Exemple d'installation

Encastrement dans le tableau de bord

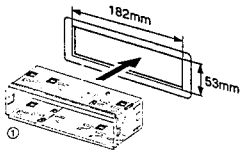
Montage-voorbeeld

Inbouw in het dashboard

1



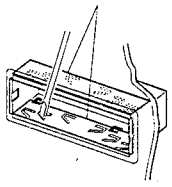
2



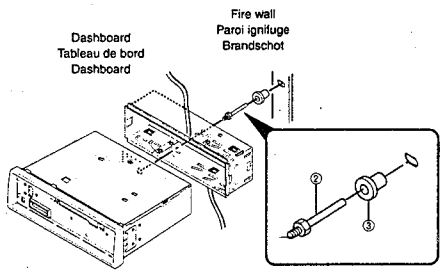
with the TOP marking up
avec l'inscription TOP dirigée vers le haut
met de zijde met het woord "TOP" naar boven gericht

3

Bend these claws if necessary.
Si nécessaire, plier ces griffes.
Indien nodig kunt u deze lipjes ombuigen.



4



Mounting the Unit in a Japanese Car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your nearest Sony dealer.

Installation de l'appareil dans une voiture japonaise

Si l'appareil ne peut pas être installé dans une voiture japonaise, consulter le revendeur Sony le plus proche.

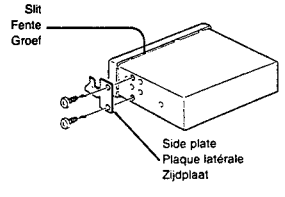
Inbouwen van het apparaat in een Japanese auto

Het is mogelijk dat het apparaat in sommige auto's niet kan worden ingebouwd. Raad pleeg in dat geval uw Sony handelaar.

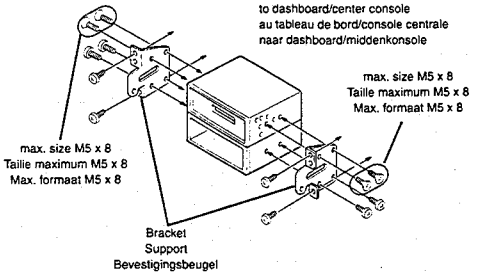
1 Run a blade along the slits on the back of the front trim and cut it off the unit. At the same time, remove the side plate as well.

Passer une lame le long des fentes à l'arrière de la bordure avant et la couper. Au même moment, enlever également la plaque latérale.

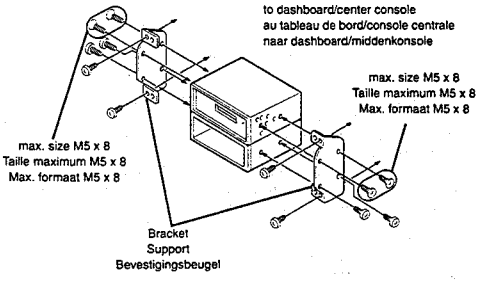
Steek een mes in de gleuven aan de achterzijde van de voorplaat en snijd de voorplaat van het apparaat weg. Verwijder tegelijkertijd de zijdplaat.



2 TOYOTA



NISSAN



Note
Use the existing parts supplied to your car.

Remarque
Utiliser les pièces fournies avec la voiture.

Opmerking
Gebruik het montage-materiaal dat bij uw auto wordt geleverd.

Connections Connexions Aansluitingen

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **red** power input lead only after all other leads are connected. And be sure to connect it to the positive 12 V power terminal which is energized when the ignition key is set to the accessory position.
- **Run all ground wires to a common ground point.**

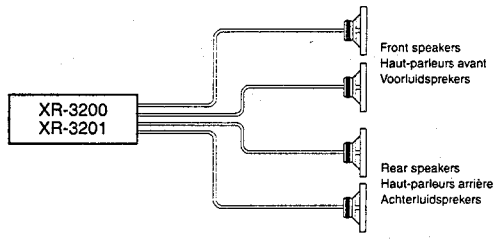
Précautions

- Cet appareil est conçu pour fonctionner sur courant continu de 12 V avec masse négative.
- Avant d'effectuer les connexions, débrancher la borne de terre de la batterie du véhicule pour éviter tout court-circuit.
- Connecter le fil d'entrée d'alimentation **rouge** en dernier. Le raccorder à la borne d'alimentation positive de 12 V qui est énergétisée quand la clé de contact est sur la position accessoire.
- **Raccorder tous les fils de terre à un point de masse commun.**

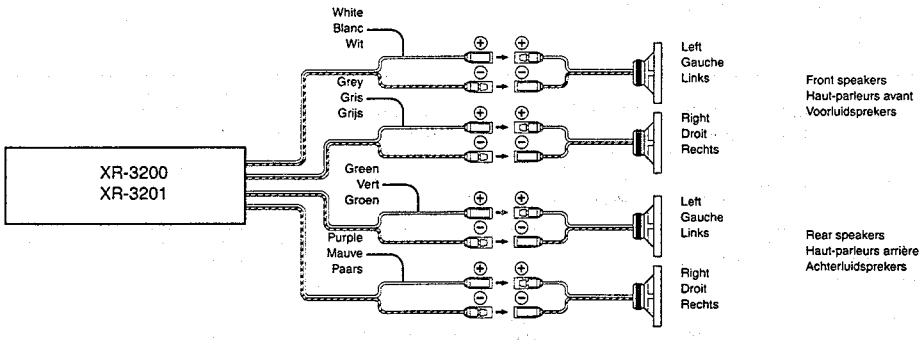
Opgelet

- Dit apparaat mag uitsluitend gebruikt worden op 12 V gelijkstroom.
- Alvorens te beginnen met het maken van aansluitingen, dient u de aardklem van de auto-accu los te maken. Dit om kortsluiting te voorkomen.
- Sluit de **rode** stroomdraad pas aan nadat alle andere aansluitingen zijn gemaakt. Zorg ervoor dat deze stroomdraad op de positieve 12 V accu-aansluiting wordt aangesloten. De draad komt dan onder spanning te staan, wanneer de kontaktsleutel in de accessoire-stand wordt gezet.
- **Sluit alle aarddraden op een gemeenschappelijk aardpunt aan.**

Connection Diagram/Schéma de connexions Aansluitschema



Speaker Connections Connexion des haut-parleurs Luidspreker-aansluiting



Notes on speaker connections

- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.
- Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.
- Do not connect the speakers in parallel.
- Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.

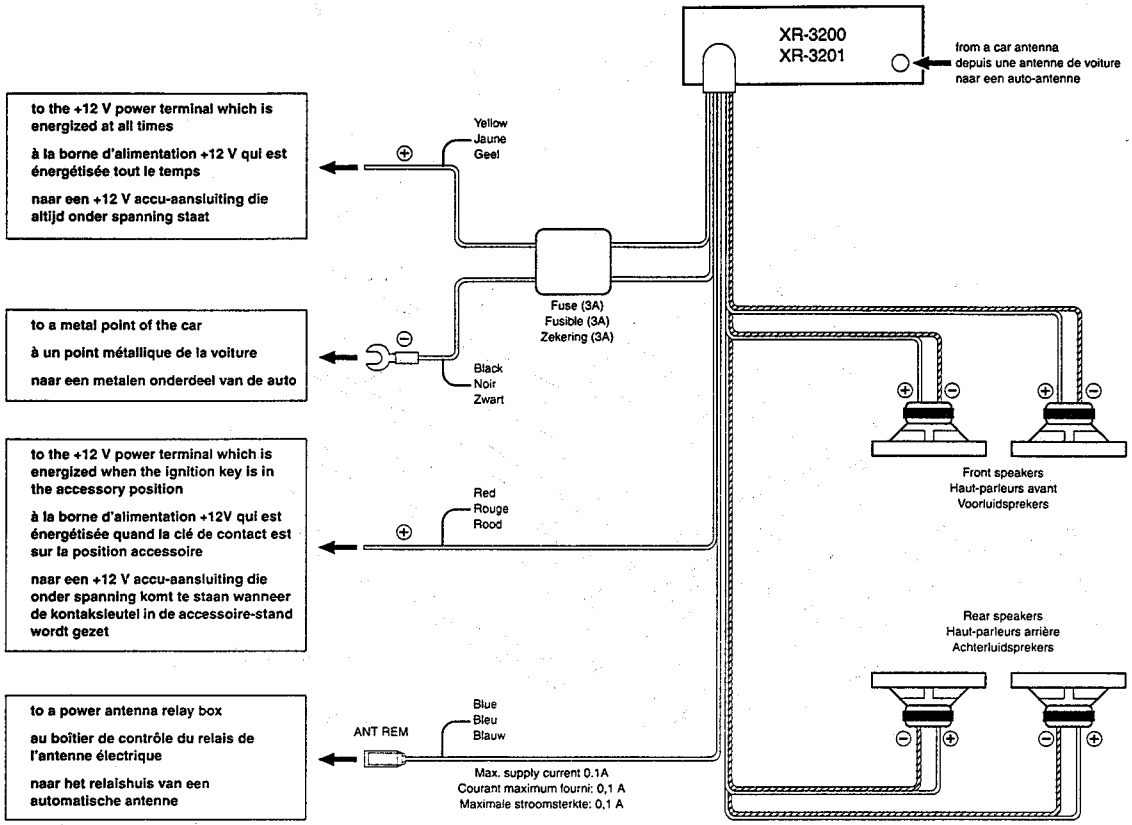
Remarques sur la connexion des haut-parleurs

- Utiliser des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.
- Ne pas raccorder le bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.
- Ne pas tenter de raccorder les haut-parleurs en parallèle.
- Ne pas raccorder des haut-parleurs actifs (avec amplificateurs intégrés) aux bornes de haut-parleur de l'appareil sous peine de les endommager. Veiller à raccorder des haut-parleurs passifs à ces bornes.

Opmerkingen betreffende het aansluiten van de luidsprekers

- Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verwerken. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.
- Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter en linker luidspreker niet op elkaar aan.
- Probeer niet de luidsprekers parallel aan te sluiten.
- Sluit geen actieve luidsprekers (luidsprekers met ingebouwde versterkers) aan op de luidsprekeraansluitingen van het apparaat. Dit kan resulteren in beschadiging van de aktieve luidsprekers. Op deze aansluitingen mogen uitsluitend passieve luidsprekers worden aangesloten.

Connections of example / Connexions de l'exemple / Aansluitingen van voorbeeld


XR-3200
XR-3201
from a car antenna
depuis une antenne de voiture
naar een auto-antenne
to the +12 V power terminal which is energized at all times
à la borne d'alimentation +12 V qui est énergétisée tout le temps
naar een +12 V accu-aansluiting die altijd onder spanning staat
Yellow
Jaune
Geel
Fuse (3A)
Fusible (3A)
Zekering (3A)
to a metal point of the car
à un point métallique de la voiture
naar een metalen onderdeel van de auto
Black
Noir
Zwart
to the +12 V power terminal which is energized when the ignition key is in the accessory position
à la borne d'alimentation +12V qui est énergétisée quand la clé de contact est sur la position accessoire
naar een +12 V accu-aansluiting die onder spanning komt te staan wanneer de kontaksleutel in de accessoire-stand wordt gezet
Red
Rouge
Rood
Front speakers
Haut-parleurs avant
Voorluidsprekers
Rear speakers
Haut-parleurs arrière
Achterluidsprekers
to a power antenna relay box
au boîtier de contrôle du relais de l'antenne électrique
naar het relaishuis van een automatische antenne
ANT REM
Blue
Bleu
Blauw
Max. supply current 0.1A
Courant maximum fourni: 0,1 A
Maximale stroomsterkte: 0,1 A

Notes on the control leads
- The power antenna control lead (blue) supplies +12V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) function.
- A power antenna without relay box cannot be used with this unit.

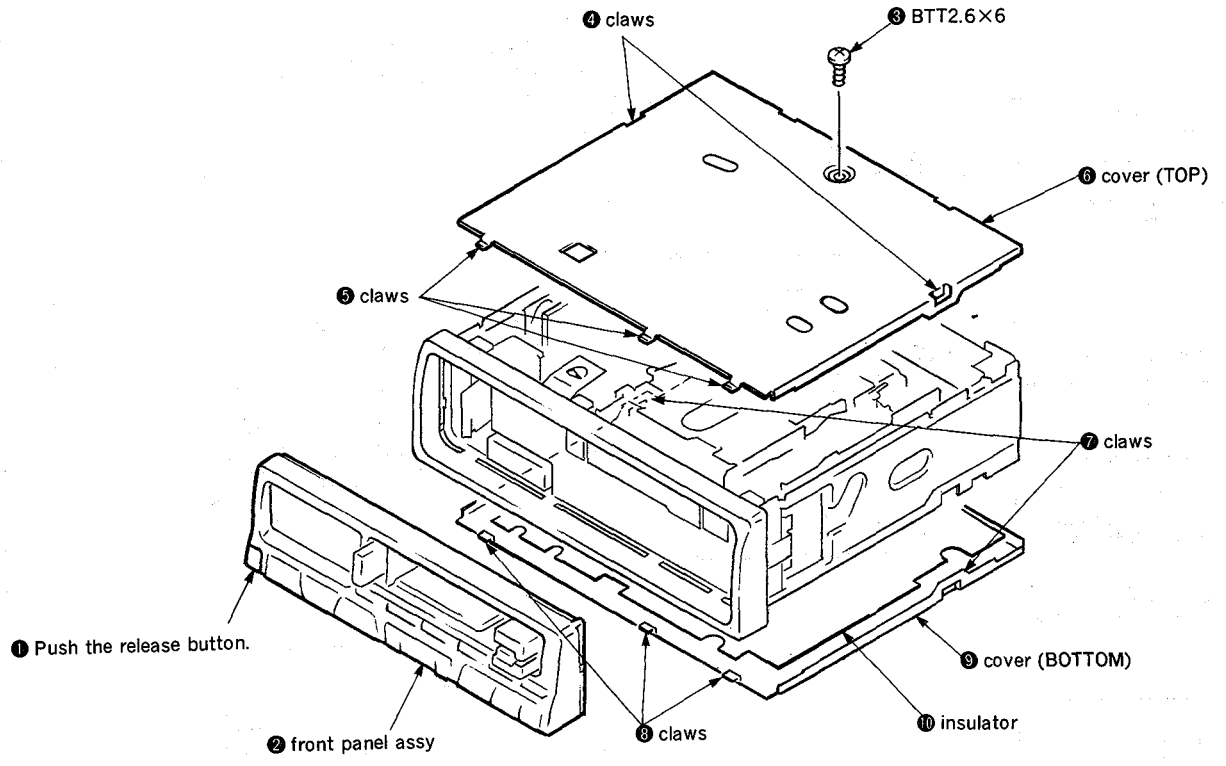
Remarques sur les fils de contrôle
- Le fil de contrôle de l'antenne électrique (bleu) fourni du courant continu de +12 V quand le tuner est mis sous tension ou quand la fonction ATA (Activation automatique du tuner) est activée.
- Une antenne électrique sans boîtier de relais ne peut pas être utilisé avec cet appareil.

Opmerkingen betreffende de bedieningsaansluitingen
- Het aansluitsnoer voor de automatische antenne (blauw) levert +12 V gelijkstroom als de tuner wordt ingeschakeld of als de ATA automatische tuner-inschakelfunktie in werking treedt.
- Met dit apparaat is het niet mogelijk een automatische antenne zonder relaishuis te gebruiken.

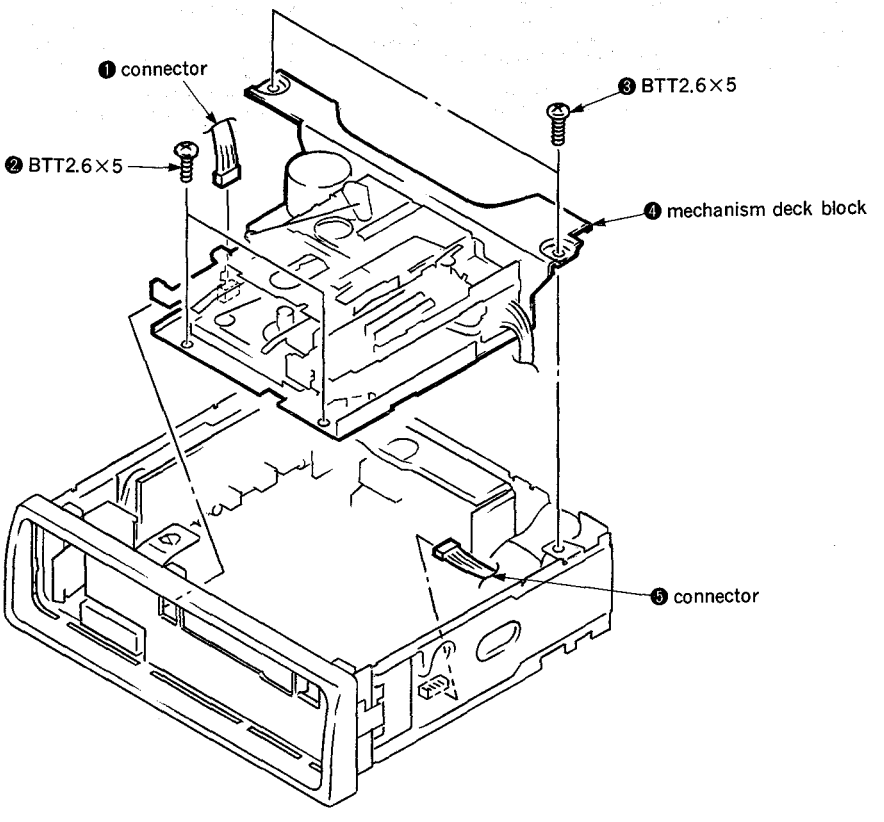
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

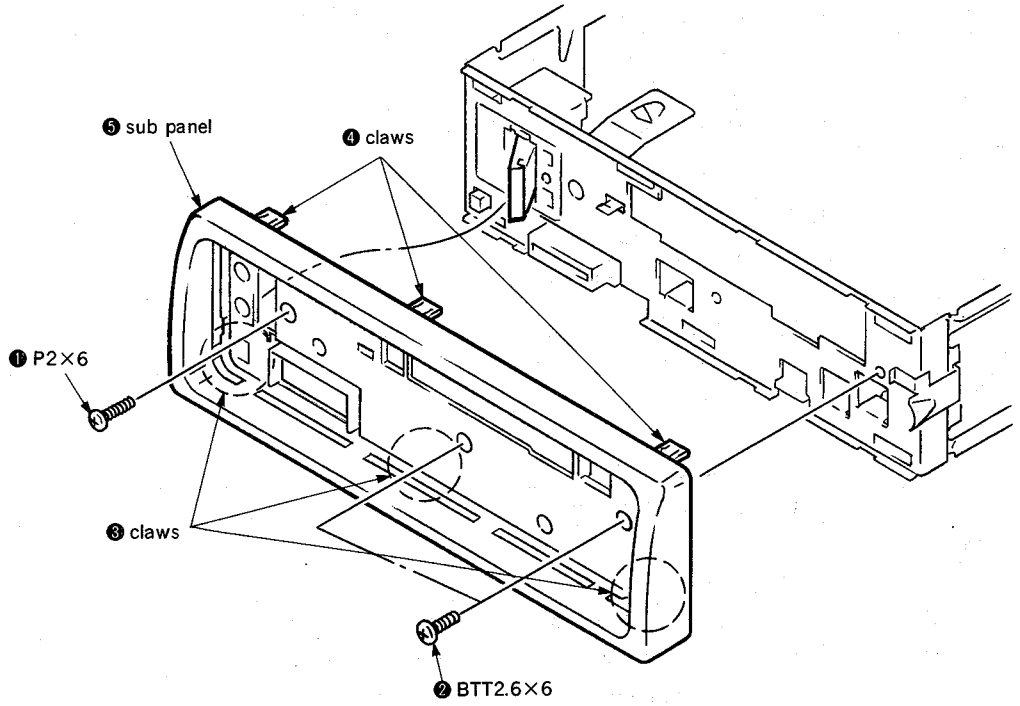
2-1. COVER



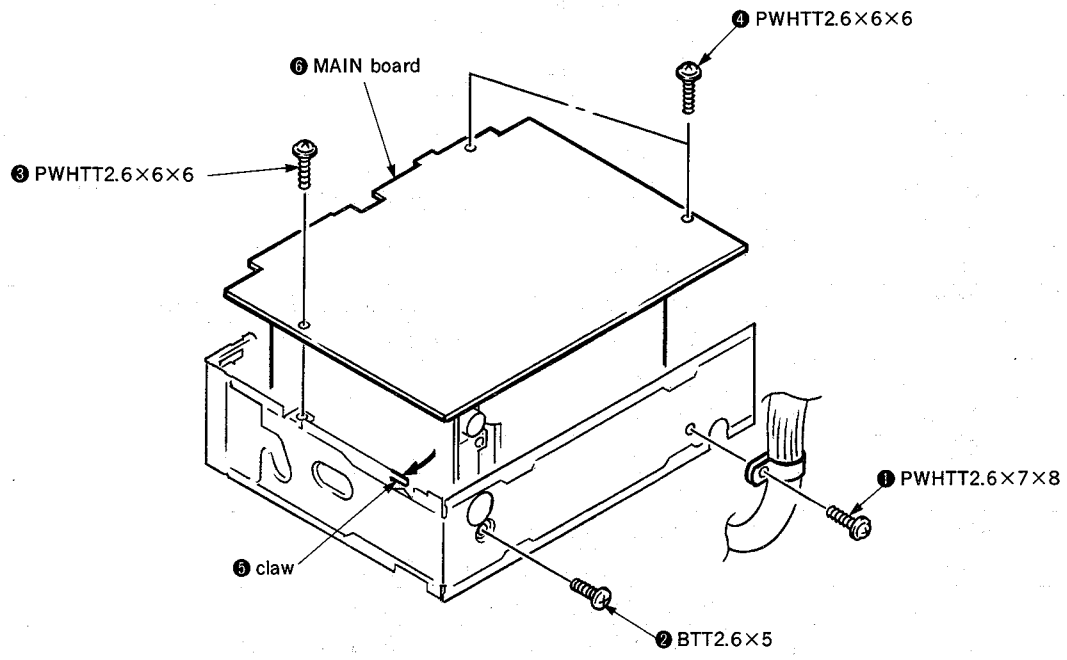
2-2. MECHANISM DECK BLOCK



2-3. SUB PANEL



2-4. MAIN BOARD



SECTION 3
DIAGRAMS

3-1. PIN FUNCTION

• IC701 LC7233N-8861

Pin No.	Pin Name	I/O	Pin Function
1	XIN	I	Crystal oscillator connecting pin (4.5MHz)
2	——	I	Test pin of device. (Connecting to GND.)
3	$\overline{\text{TEST}}$	I	Test (All display) input pin
4	$\overline{\text{WIND}}$	I	FORWARD/REWIND input pin
5	RA/$\overline{\text{TA}}$	I	TAPE mode input pin
6	SD/ST	I	STATION DETECTOR/STEREO input pin
7	$\overline{\text{MONO}}$	O	MONAURAL control pin
8	$\overline{\text{LW}}$	O	LW band control pin
9	FM/$\overline{\text{AM}}$	O	FM band control pin
10	LOCAL	O	LOCAL/DX control pin
11	SEEK	O	IF gate control pin
12	OIRT	O	Not used.
13	——	—	Not used.
14	RA MUTE	O	Radio MUTE pin
15	TA MUTE	O	Tape MUTE pin
16	MUTE	O	Total MUTE pin
17	VOL CK	O	Serial clock output pin of electrical volume.
18	VOL SO	O	Serial data output pin of electrical volume.
19	A. STBY	O	Power amplifier standby control pin
20	POWER	O	POWER control pin
21	MOTOR	O	MOTOR control pin
22	——	—	Not used.
23	$\overline{\text{SK IN}}$	I	SK signal input pin
24	DK IN	I	DK signal input pin
25	$\overline{\text{FWD}}$/REV	I	$\overline{\text{FORWARD}}$ input pin
26	SI	I	Data input pin for TEST.
27	SO	O	Data output pin for TEST.
28	CK	O	Clock output pin for TEST.
29	VOLG	—	Not used.
30	USAEN	O	USAEN initial diode scan output pin (US, Canadian model)
31	MONEN	O	Not used.
32	JPNEN	O	Not used.
33	SDKEN	O	SDKEN initial diode scan output pin (German model)
34	LWEN	O	LWEN initial diode scan output pin (XR-3201)
35	OIREN	O	Not used.
36	$\overline{\text{ATAEN}}$	O	Not used.
37	$\overline{\text{FADEN}}$	O	Not used.
38—42	——	—	Not used.
43—45	KS0—KS2	O	Key-scan output pin
46	LCD SO	O	Serial data output pin for LCD driver.
47	LCD CK	O	Serial clock output pin for LCD driver.
48	LCD CE	O	Serial chip enable output pin for LCD driver.
49	$\overline{\text{LINH}}$	O	Display light off output pin of LCD driver.

• Semiconductor Location

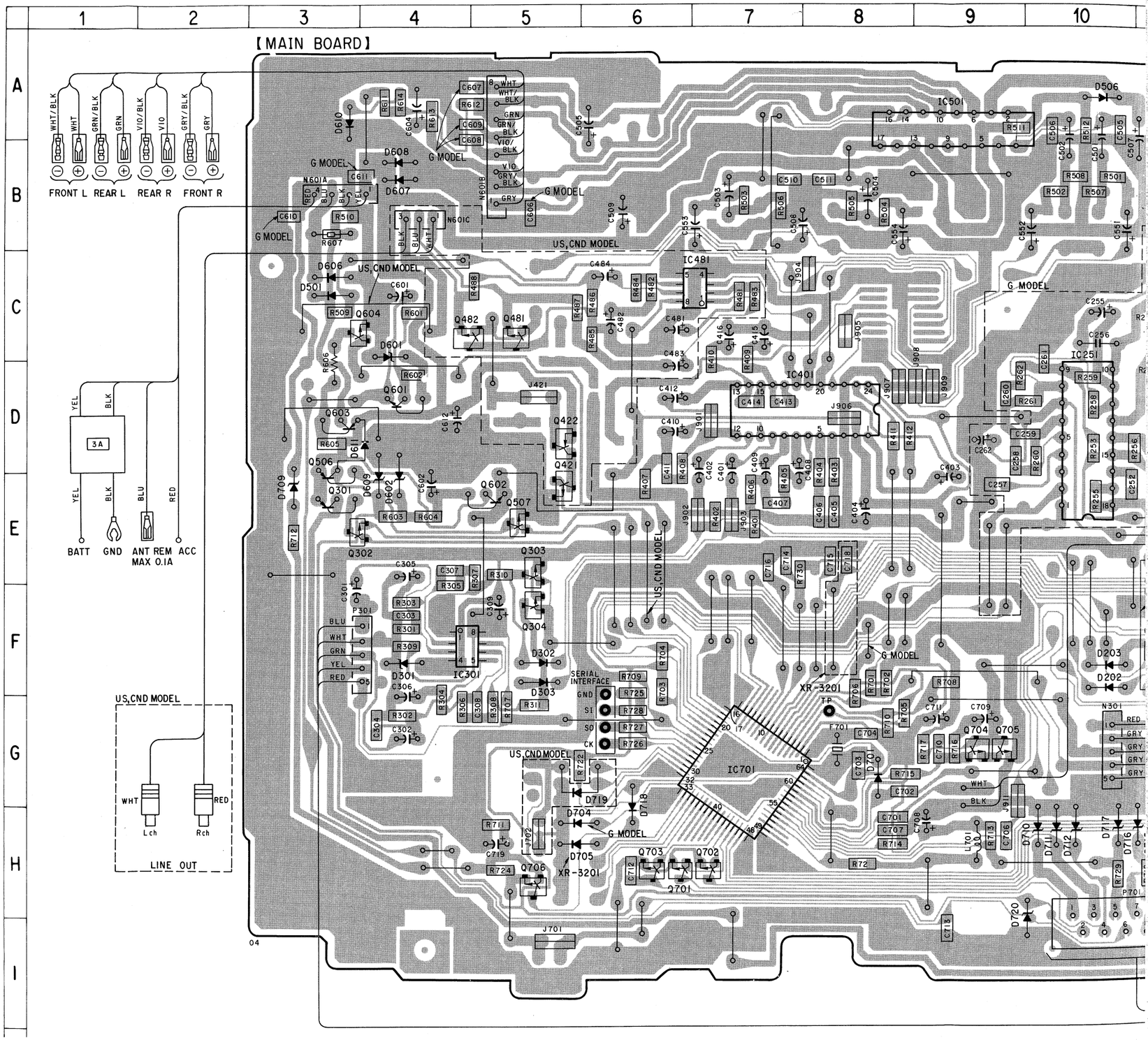
Ref. No.	Location
D201	F-10
D203	F-10
D301	F-4
D302	F-5
D303	F-5
D501	C-3
D506	A-10
D601	C-4
D602	E-4
D606	C-3
D607	B-4
D608	B-4
D609	E-4
D610	A-3
D611	D-3
D701	G-8
((D704))	H-5
(D705)	H-5
D709	E-3
D710	H-10
D711	H-10
D712	H-10
D713	H-11
D714	H-11
D715	H-11
D716	H-10
D717	H-10
D718	G-6
D719	G-5
D720	H-9
D801	G-22
D802	G-22
D803	H-22
D804	H-22
D805	H-22
((IC251))	D-10
IC301	F-4
IC401	D-7
IC481	C-6
IC501	A-9
IC701	G-7
IC801	G-21
Q201	F-11
Q202	F-11
Q301	E-3
Q302	E-3
Q303	E-5
Q304	F-5
Q421	E-5
Q422	D-5
Q481	C-5
Q482	C-4
Q506	D-3
Q507	E-5
Q601	D-4
Q602	E-5
Q603	D-3
Q604	C-3
Q701	H-6
Q702	H-7
Q703	H-6
Q704	G-9
Q705	G-9
Q706	H-5

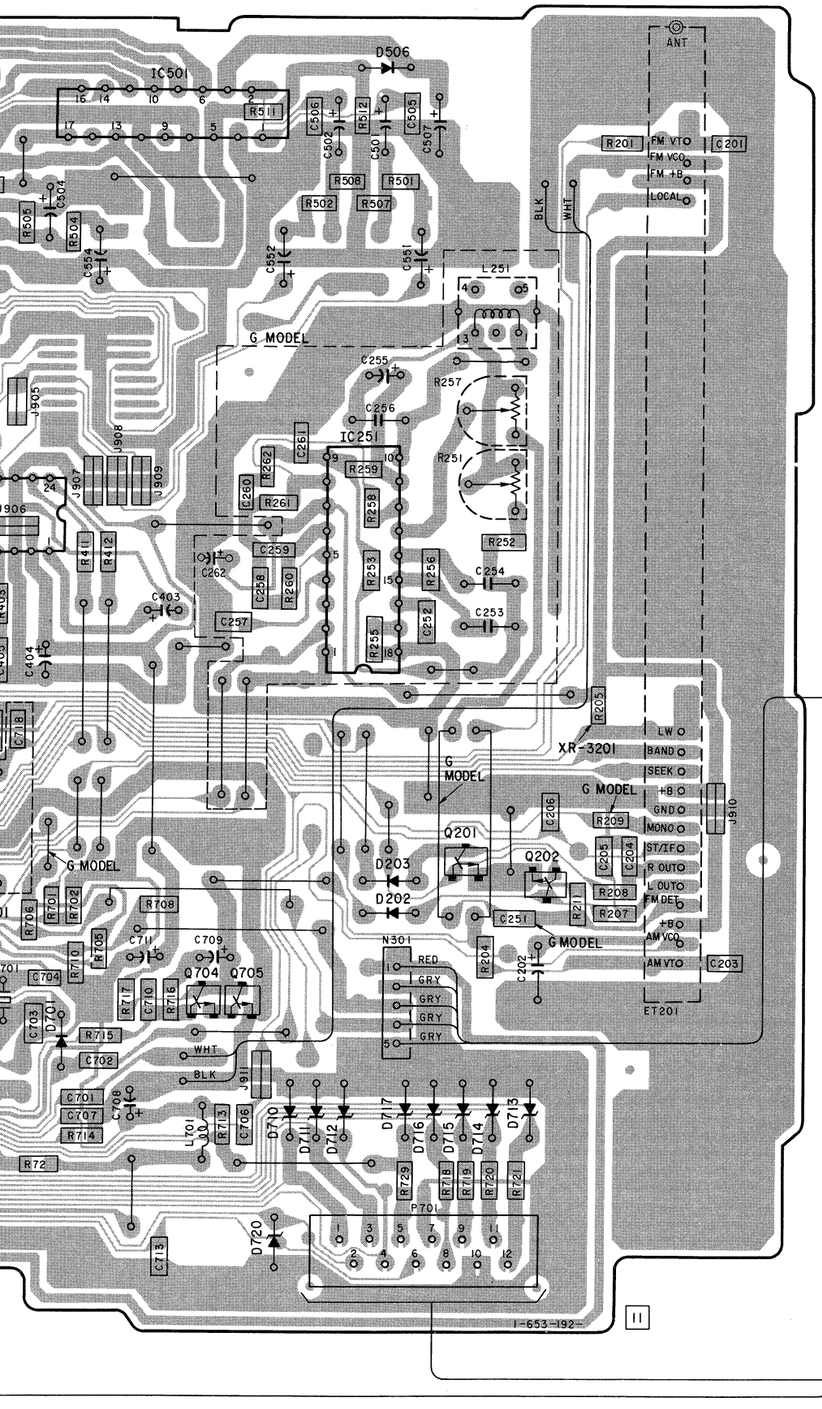
( ) : XR-3201 ONLY
(( )) : XR-3202 ONLY

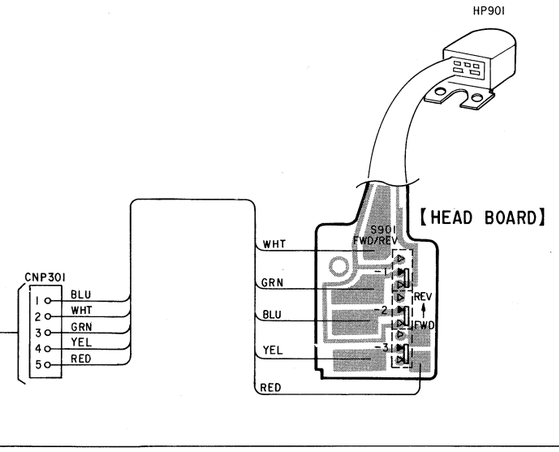
Note :

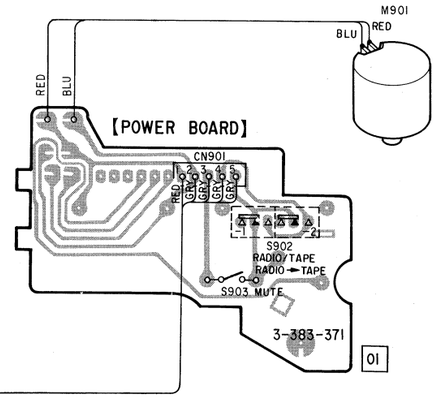
- ○— : parts extracted from the component side.
- — : parts extracted from the conductor side.
- ▨ : Pattern on the side which is seen.
- Abbreviations
  CND : Canadian model
  G : German model

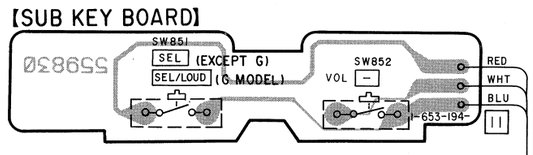
3-3. PRINTED WIRING BOARDS • Refer to page 28 for Semiconductor Lead Layouts.

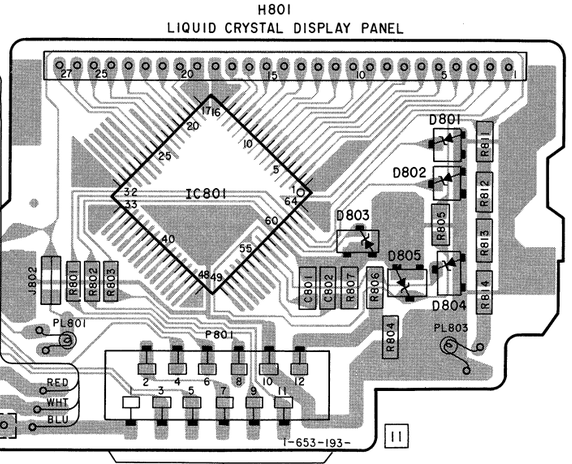


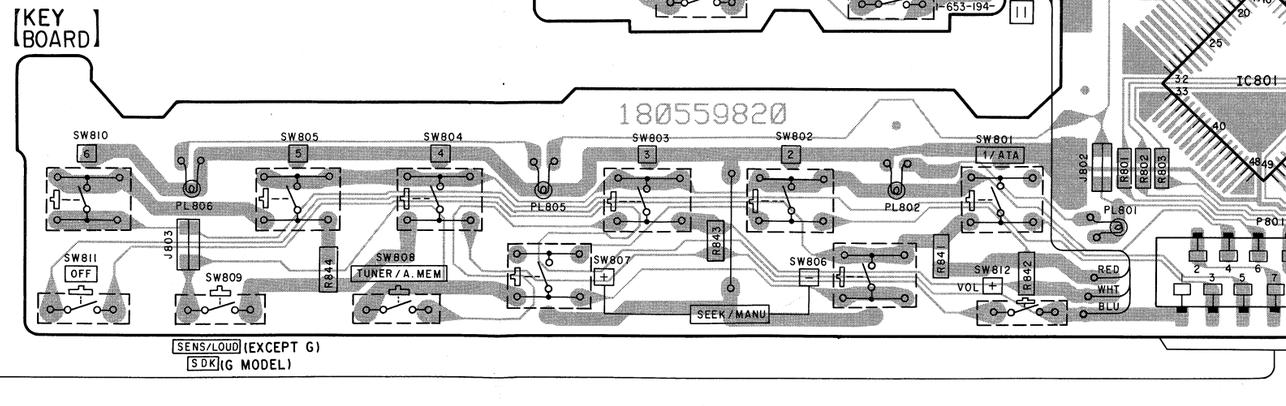

IC501
D506
ANT
R201
FM VTO
FM VCO
FM IF
LOCAL
C201
BLK
WHT
L251
G MODEL
C255
R257
C256
IC251
R251
R252
C254
C253
C262
C259
C258
R260
C257
C403
C404
R205
XR-3201
LW
BAND
SEEK
+B
GND
MONO
ST/IFO
R OUTO
L OUTO
FM DET
+B
AM VCO
AM VTO
C203
ET201
J910
G MODEL
Q201
Q202
D203
D202
C251
R204
C202
N301
RED
GRY
GRY
GRY
GRY
J911
WHT
BLK
L701
D710
D711
D712
D717
D716
D715
D714
D713
R729
R718
R719
R720
R721
P701
D720
C713
R72
I-653-192-
II


HP901
【HEAD BOARD】
CNP301
1 BLU
2 WHT
3 GRN
4 YEL
5 RED
S901
FWD/REV
WHT
GRN
BLU
YEL
RED
REV
FWD

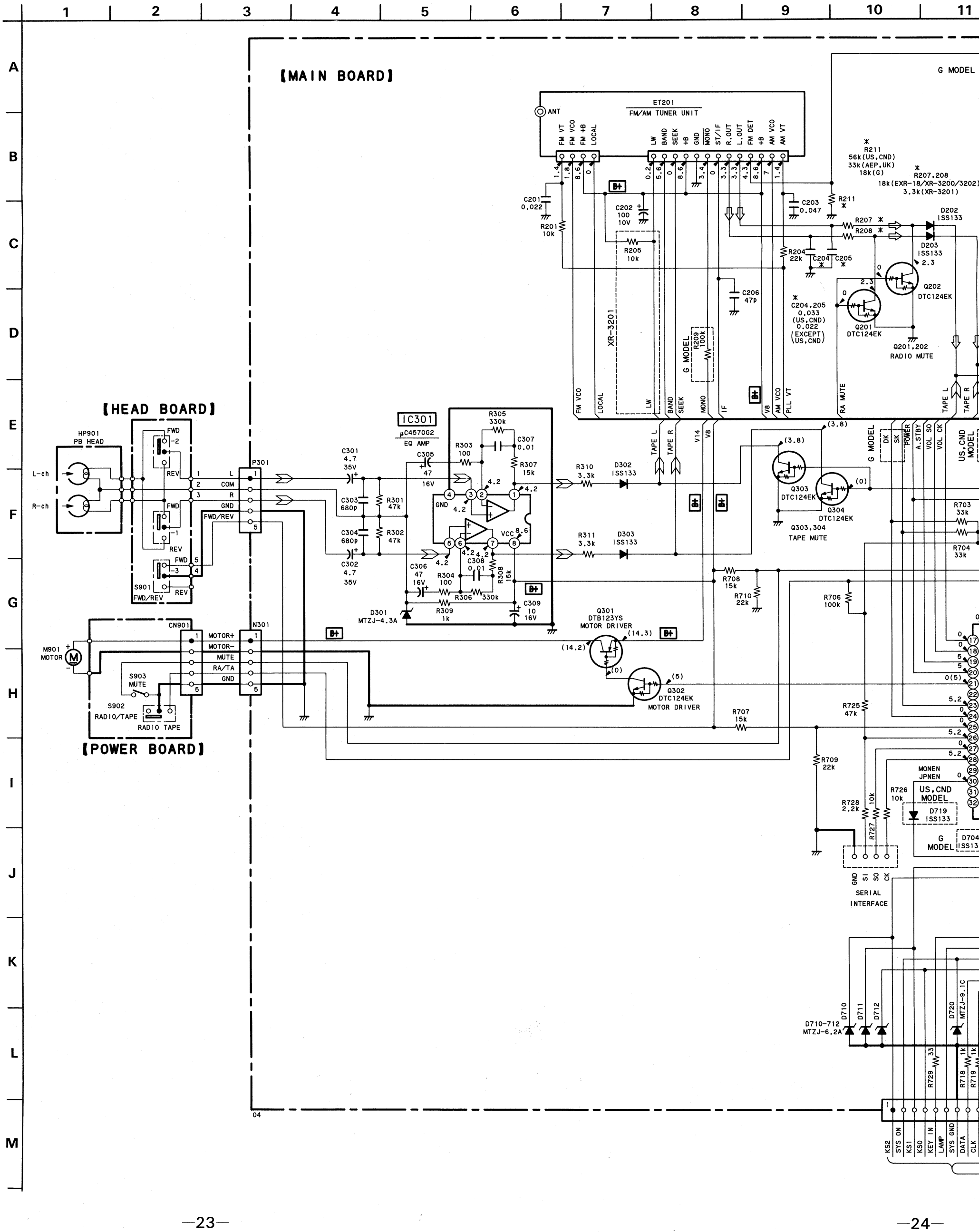

M901
RED
BLU
RED
BLU
【POWER BOARD】
CN901
S902
RADIO/TAPE
RADIO→TAPE
S903 MUTE
3-383-371
01

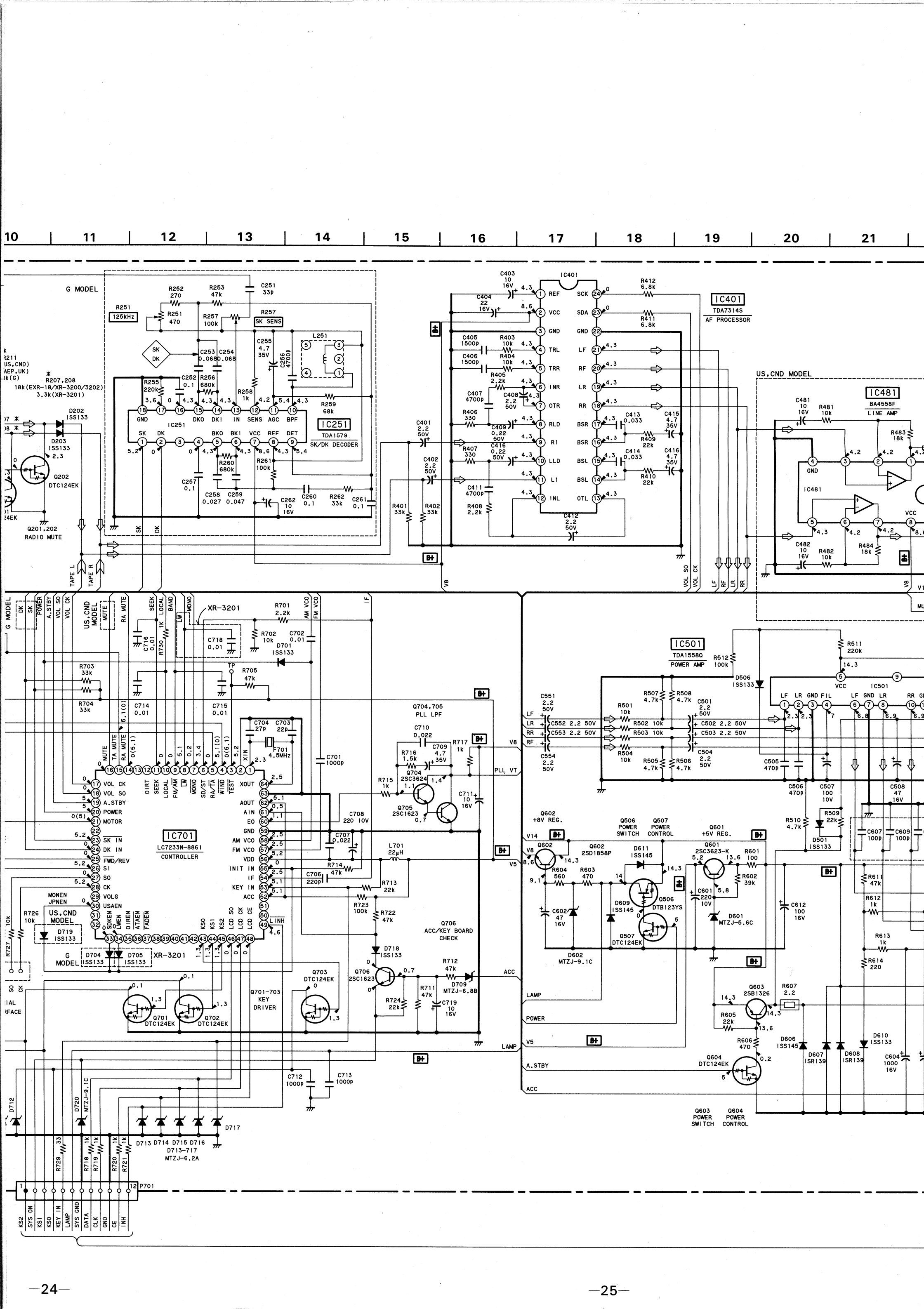

【SUB KEY BOARD】
SW851
SEL (EXCEPT G)
SEL/LOUD (G MODEL)
SW852
VOL
RED
WHT
BLU
I-653-194-
II

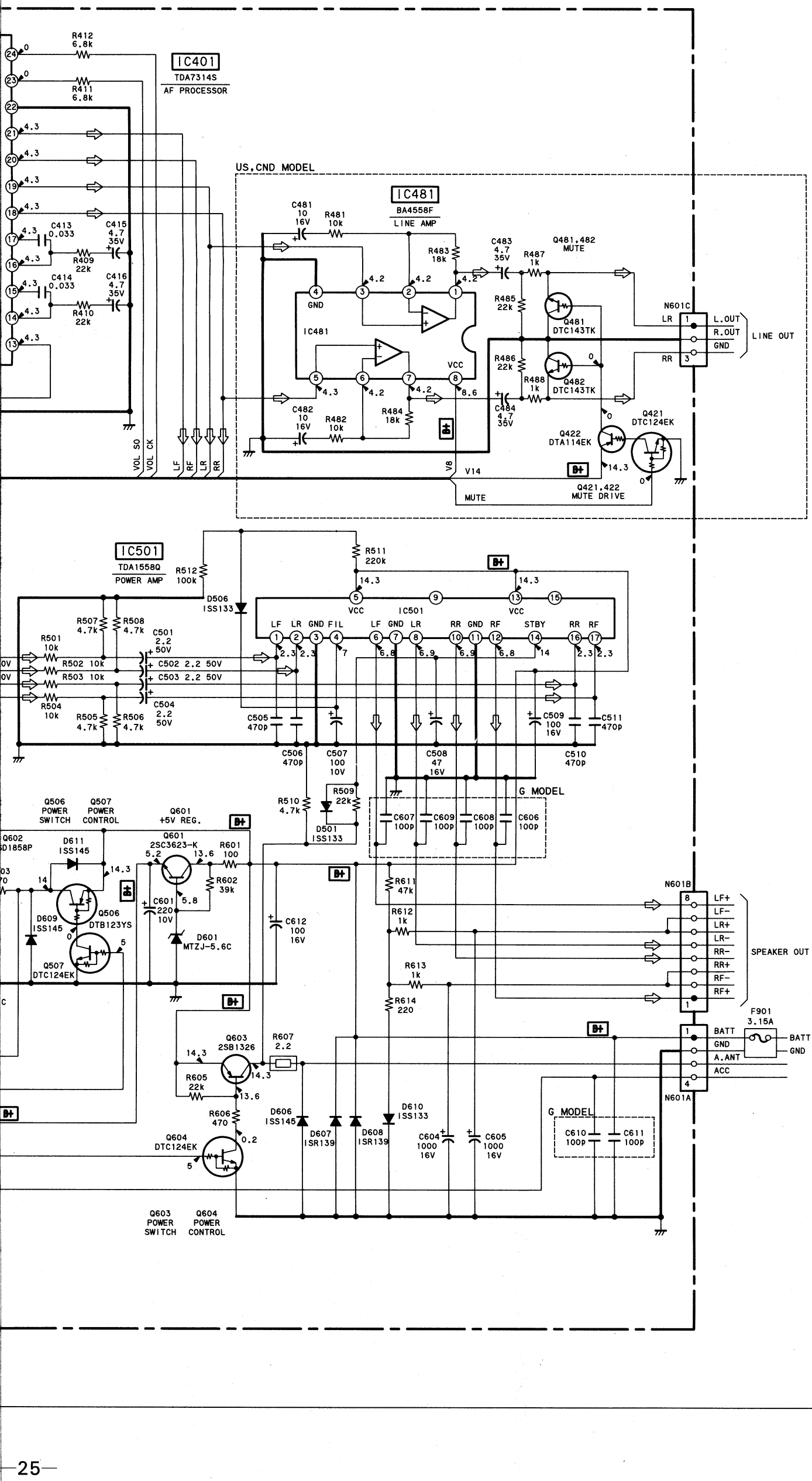

H801
LIQUID CRYSTAL DISPLAY PANEL
IC801
D801
D802
D803
D805
D804
PL803
P801
PL801
I-653-193-
II

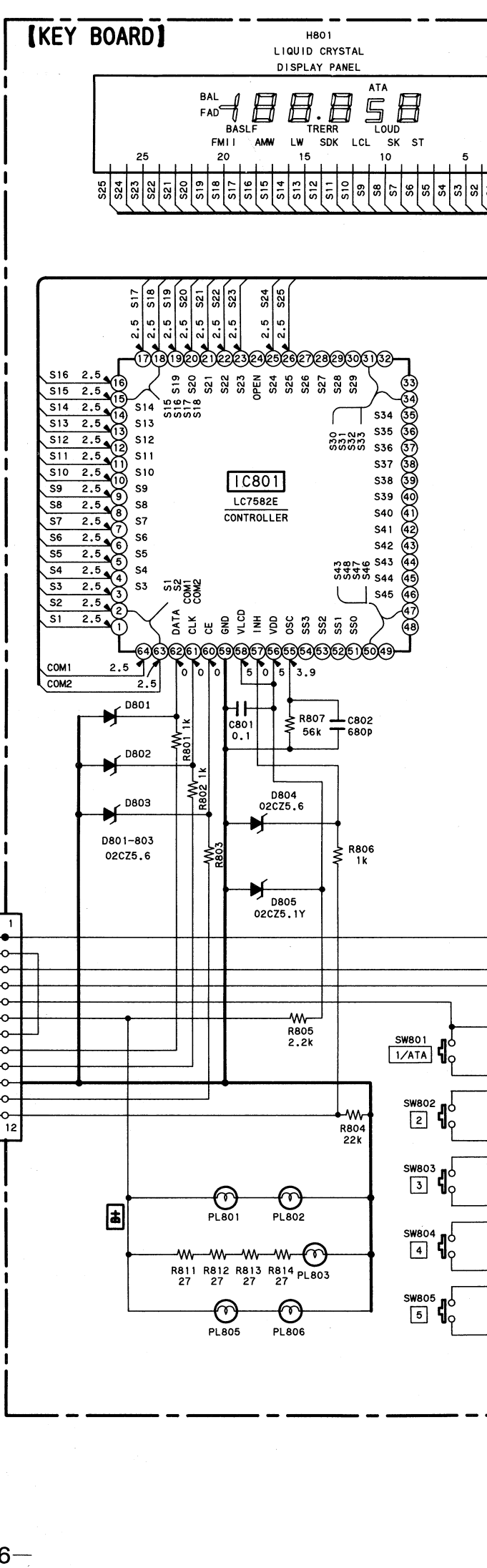

【KEY BOARD】
180559820
SW810
SW805
SW804
SW803
SW802
SW801
1/ATA
PL806
PL805
PL802
SW811
OFF
SW809
SW808
TUNER/A.MEM
SW807
SW806
SW812
VOL
SEEK/MANU
SENS/LOUD (EXCEPT G)
SDK (G MODEL)

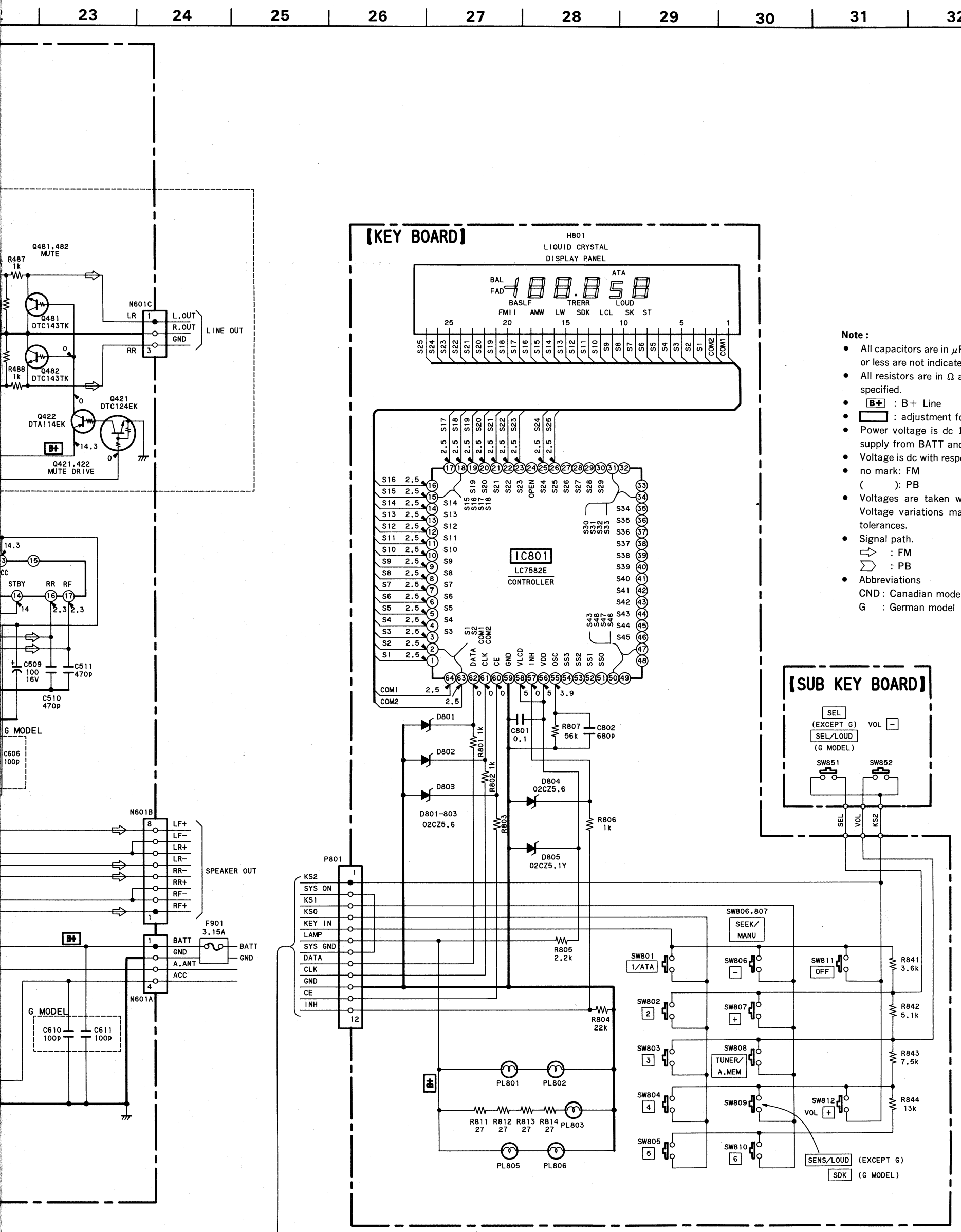
3-4. SCHEMATIC DIAGRAM • Refer to page 28 for IC Block Diagrams.




10 11 12 13 14 15 16 17 18 19 20 21
G MODEL
R251 125kHz
R252 270
R253 47k
C251 33p
R251 470
R257 100k
R257 SK SENS
L251
SK DK
C253 0.068
C254 0.068
C255 4.7 35V
C256 4700p
R255 220k
C252 0.1
R256 680k
R258 1k
R259 68k
IC251
SK DK BKO BKI VCC REF DET
GND DKO DKI IN SENS AGC BPF
R260 680k
R261 100k
C257 0.1
C258 0.027
C259 0.047
C260 0.1
R262 33k
C261 0.1
C262 10 16V
R207,208
18k(EXR-18/XR-3200/3202)
3.3k(XR-3201)
D202 ISS133
D203 ISS133
2.3
Q202 DTC124EK
Q201,202 RADIO MUTE
TAPE L
TAPE R
IC401
TDA7314S
AF PROCESSOR
C403 10 16V
C404 22 16V
C405 1500p
C406 1500p
C407 4700p
C408 2.2 50V
C409 0.22 50V
C411 4700p
C412 2.2 50V
C413 0.033
C414 0.033
C415 4.7 35V
C416 4.7 35V
C401 2.2 50V
C402 2.2 50V
R401 33k
R402 33k
R403 10k
R404 10k
R405 2.2k
R406 330
R407 330
R408 2.2k
R409 22k
R410 22k
R411 6.8k
R412 6.8k
SCK SDA GND TRL TRR INR OTR RLD R1 LLD L1 INL
LF RF LR RR BSR BSR BSL BSL OTL
US,CND MODEL
IC481
BA4558F
LINE AMP
C481 10 16V
R481 10k
R483 18k
C482 10 16V
R482 10k
R484 18k
G MODEL
US,CND MODEL
XR-3201
R701 2.2k
R702 10k
C702 0.01
D701 ISS133
C716 0.01
C718 0.01
R730 1K
R703 33k
R704 33k
TP
R705 47k
C714 0.01
C715 0.01
C701 1000p
C704 27p
C703 22p
F701 4.5MHz
IC701
LC7233N-8861
CONTROLLER
MUTE TA MUTE RA MUTE SEEK LOCAL BAND MONO LW
VOL CK VOL SO A.STBY POWER MOTOR SK IN DK IN FWD/REV SI SO CK VOLG USAEN
OIRT SEEK LOCAL FM/AM LW MONO SD/ST RA/TA WIND TEST
XOUT XIN AOUT AIN EO GND AM VCO FM VCO VDD INIT IN IF KEY IN ACC LINH
MONEN JPNEN
SDKEN LWEN OIREN ATAEN FADEN
KSO KS1 KS2 LCD SO LCD CK LCD CE
D719 ISS133
D704 ISS133
D705 ISS133
Q704,705 PLL LPF
C710 0.022
C709 4.7 35V
R716 1.5k
R717 1k
R715 1k
Q704 2SC3624
Q705 2SC1623
C711 10 16V
PLL VT
C708 220 10V
C707 0.022
C706 220p
R714 47k
L701 22μH
R713 22k
R723 100k
R722 47k
Q706 2SC1623
ACC/KEY BOARD CHECK
D718 ISS133
R712 47k
D709 MTZJ-6.8B
R724 22k
R711 47k
C719 10 16V
Q703 DTC124EK
Q701 DTC124EK
Q702 DTC124EK
Q701-703 KEY DRIVER
C712 1000p
C713 1000p
D712
D720 MTZJ-9.1C
D717
D713 D714 D715 D716
D713-717 MTZJ-6.2A
R729 33
R718 1k
R719 1k
R720 1k
R721 1k
P701
KS2 SYS ON KS1 KSO KEY IN LAMP SYS GND DATA CLK GND CE INH
IC501
TDA1558Q
POWER AMP
R512 100k
D506 ISS133
C551 2.2 50V
C552 2.2 50V
C553 2.2 50V
C554 2.2 50V
R501 10k
R502 10k
R503 10k
R504 10k
R507 4.7k
R508 4.7k
R505 4.7k
R506 4.7k
C501 2.2 50V
C502 2.2 50V
C503 2.2 50V
C504 2.2 50V
C505 470p
C506 470p
C507 100 10V
C508 47 16V
R511 220k
R510 4.7k
R509 22k
D501 ISS133
C607 100p
C609 100p
LF LR GND FIL LF GND LR RR GND
VCC
Q602 +8V REG.
Q602 2SD1858P
Q506 POWER SWITCH
Q507 POWER CONTROL
Q601 +5V REG.
Q601 2SC3623-K
D611 ISS145
D609 ISS145
Q506 DTB123YS
Q507 DTC124EK
D602 MTZJ-9.1C
D601 MTZJ-5.6C
R604 560
R603 470
R602 39k
R601 100
C601 220 10V
C602 47 16V
C612 100 16V
R611 47k
R612 1k
R613 1k
R614 220
Q603 2SB1326
R607 2.2
R605 22k
R606 470
Q604 DTC124EK
D606 ISS145
D607 ISR139
D608 ISR139
D610 ISS133
C604 1000 16V
Q603 POWER SWITCH
Q604 POWER CONTROL
LF LR RR RF
LAMP POWER V5 A.STBY ACC
V14 V8 V5
VOL SO VOL CK
B+


IC401
TDA7314S
AF PROCESSOR
R412 6.8k
R411 6.8k
C413 0.033
C414 0.033
C415 4.7 35V
C416 4.7 35V
R409 22k
R410 22k
VOL SO
VOL CK
LF
RF
LR
RR
US,CND MODEL
IC481
BA4558F
LINE AMP
C481 10 16V
R481 10k
C482 10 16V
R482 10k
R483 18k
R484 18k
C483 4.7 35V
C484 4.7 35V
R485 22k
R486 22k
R487 1k
R488 1k
Q481,482 MUTE
Q481 DTC143TK
Q482 DTC143TK
Q421 DTC124EK
Q422 DTA114EK
Q421,422 MUTE DRIVE
N601C
L.OUT
R.OUT
GND
LINE OUT
VCC
V8
V14
MUTE
IC501
TDA1558Q
POWER AMP
R511 220k
R512 100k
D506 ISS133
R501 10k
R502 10k
R503 10k
R504 10k
R505 4.7k
R506 4.7k
R507 4.7k
R508 4.7k
C501 2.2 50V
C502 2.2 50V
C503 2.2 50V
C504 2.2 50V
C505 470p
C506 470p
C507 100 10V
C508 47 16V
C509 100 16V
C510 470p
C511 470p
LF LR GND FIL LF GND LR RR GND RF STBY RR RF
G MODEL
C607 100p
C609 100p
C608 100p
C606 100p
Q506 POWER SWITCH
Q507 POWER CONTROL
Q601 +5V REG.
Q601 2SC3623-K
D611 ISS145
R601 100
R602 39k
C601 220 10V
D601 MTZJ-5.6C
C612 100 16V
D609 ISS145
Q506 DTB123YS
Q507 DTC124EK
R509 22k
R510 4.7k
D501 ISS133
R611 47k
R612 1k
R613 1k
R614 220
N601B
LF+
LF-
LR+
LR-
RR-
RR+
RF-
RF+
SPEAKER OUT
F901 3.15A
BATT
GND
A.ANT
ACC
N601A
Q603 2SB1326
R607 2.2
R605 22k
R606 470
Q604 DTC124EK
D606 ISS145
D607 ISR139
D608 ISR139
D610 ISS133
C604 1000 16V
C605 1000 16V
G MODEL
C610 100p
C611 100p
Q603 POWER SWITCH
Q604 POWER CONTROL


【KEY BOARD】
H801
LIQUID CRYSTAL
DISPLAY PANEL
BAL
FAD
ATA
BASLF
TRERR
LOUD
FMII AMW LW SDK LCL SK ST
IC801
LC7582E
CONTROLLER
DATA CLK CE GND VLCD INH VDD OSC SS3 SS2 SS1 SS0
COM1
COM2
D801
D802
D803
D801-803
02CZ5.6
D804
02CZ5.6
D805
02CZ5.1Y
C801 0.1
R807 56k
C802 680p
R806 1k
R805 2.2k
R804 22k
R801 1k
R802 1k
R803
P801
KS2
SYS ON
KS1
KSO
KEY IN
LAMP
SYS GND
DATA
CLK
GND
CE
INH
SW801 1/ATA
SW802 2
SW803 3
SW804 4
SW805 5
PL801
PL802
PL803
PL805
PL806
R811 27
R812 27
R813 27
R814 27

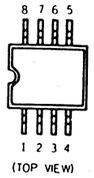


Note :

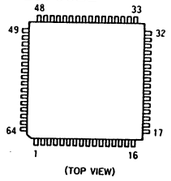
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- B+ : B+ Line
- ▭ : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from BATT and ACC terminals.
- Voltage is dc with respect to ground under no-signal conditions.
- no mark: FM
  ( ): PB
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ⇨ : PB
- Abbreviations
  CND : Canadian model
  G : German model

3-5. SEMICONDUCTOR LEAD LAYOUTS

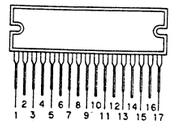
BA4558F
μPC4570G2



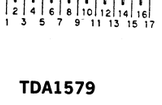
LC7233N-8861
LC7582E



TDA1558Q

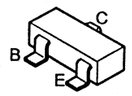


TDA1579

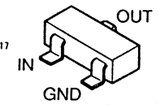


TDA7314S

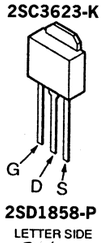
DTA114EK
DTC124EK
DTC143TK
2SC1623-L5L6
2SD601A-S



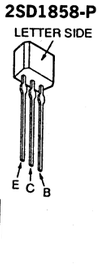
DTB123YS
2SB1326-TV2



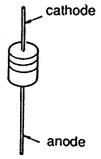
2SC3623-K



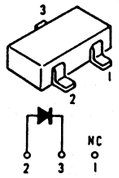
2SD1858-P
LETTER SIDE



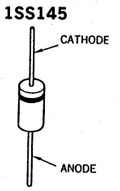
MTZJ-4.3A
MTZJ-6.2A
RD5.6ESB2
RD6.8ESB2
RD9.1ES-B3
1SR139-200
1SS133



02CZ5.6-TE85L
02CZ5.1Y-TE85L

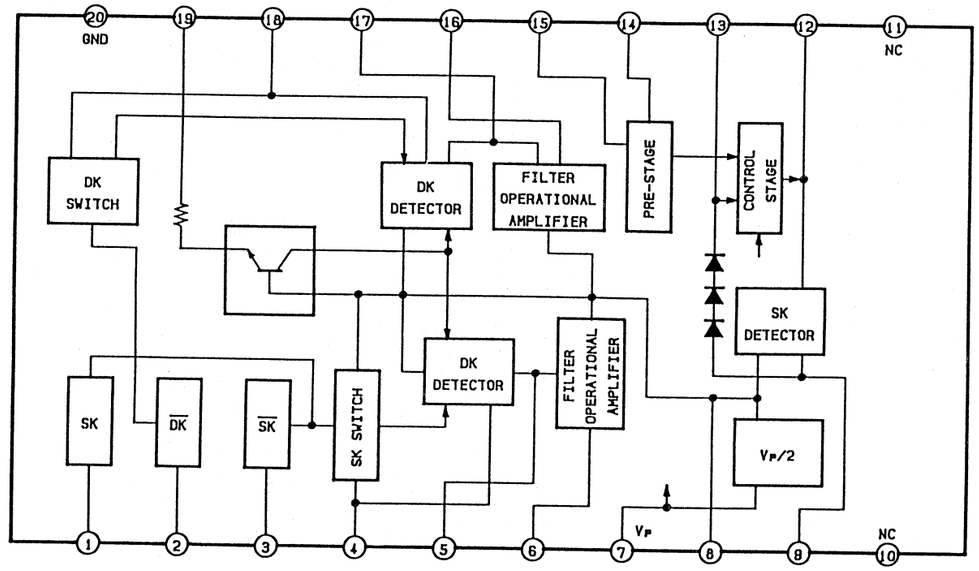


1SS145

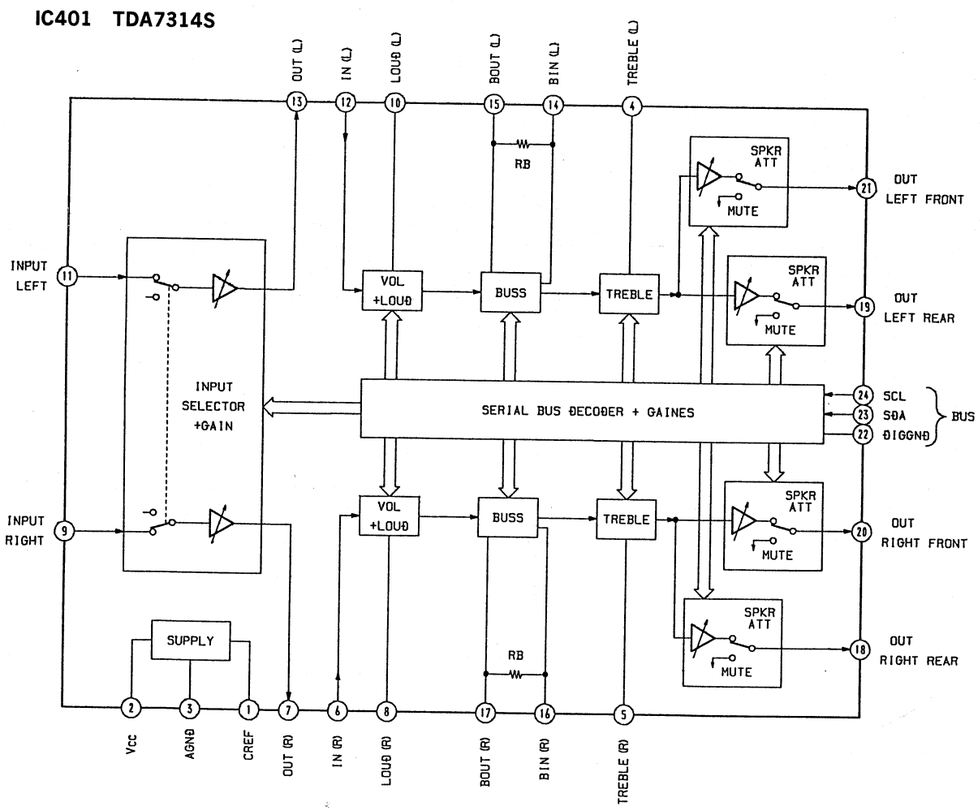


• IC Block Diagrams

IC251 TDA1579



IC401 TDA7314S

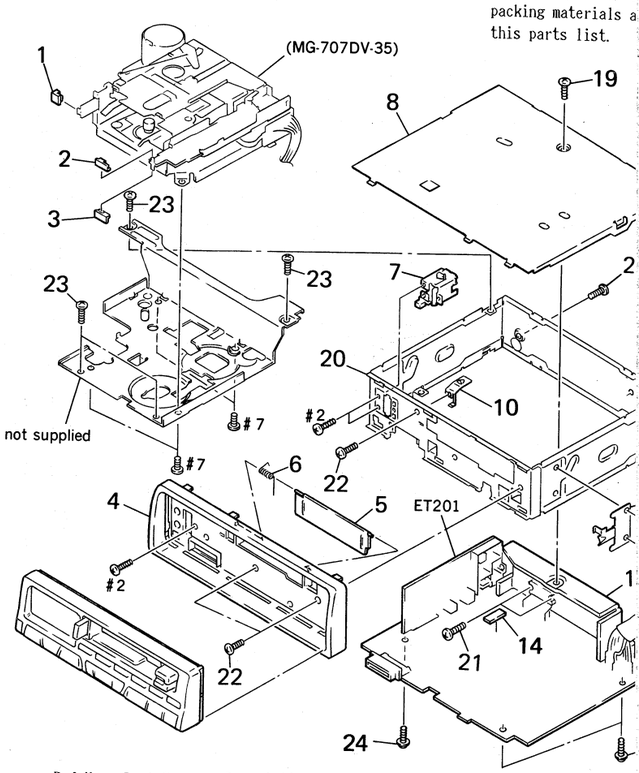


SECTION
EXPLODED VI

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- -XX and -X mean st they may have some original one.
- Color Indication o Example : KNOB, BALANCE (WH Parts Colo
- Hardware (# mark) packing materials a this parts list.

4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-915-460-01	COVER (EJ)	
2	3-915-458-01	COVER (FF)	
3	3-915-459-01	COVER (REW)	
4	3-915-185-01	PANEL, SUB	
5	3-915-199-01	DOOR, CASSETTE (XR-3200)	
5	3-915-199-11	DOOR, CASSETTE (XR-3201)	
5	3-915-199-21	DOOR, CASSETTE (XR-3202)	
5	3-915-199-31	DOOR, CASSETTE (EXR-18)	
6	3-915-720-01	SPRING (C DOOR), TORSION	
7	X-3368-695-1	LOCK ASSY	
* 8	3-915-464-01	COVER (TOP)	
9	3-915-683-01	CLAMP	
10	3-916-055-01	PLATE, LOCK	
11	3-916-056-01	PLATE (R), LOCK	
12	3-916-979-01	SCREW	
* 13	A-3222-811-A	MAIN BOARD, COMPLETE (XR-3200:AEP)	
* 13	A-3222-794-A	MAIN BOARD, COMPLETE (XR-3202)	
* 13	A-3222-795-A	MAIN BOARD, COMPLETE (XR-3201)	
* 13	A-3222-797-A	MAIN BOARD, COMPLETE (XR-3200:US, CND)	
* 13	A-3222-799-A	MAIN BOARD, COMPLETE (EXR-18)	

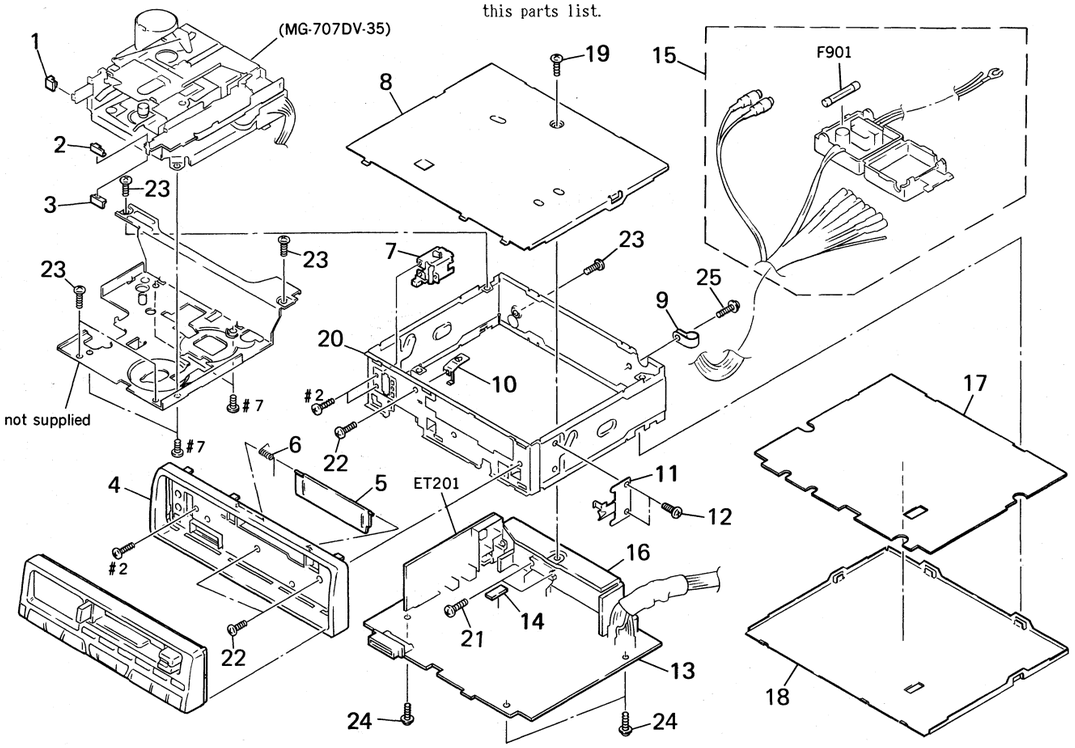
Ref. N
* 14
15
15
* 16
* 17
* 18
19
* 20
21
22
23
24
25
ET2C
ET2C
ET2C
F901

SECTION 4
EXPLODED VIEWS

NOTE:

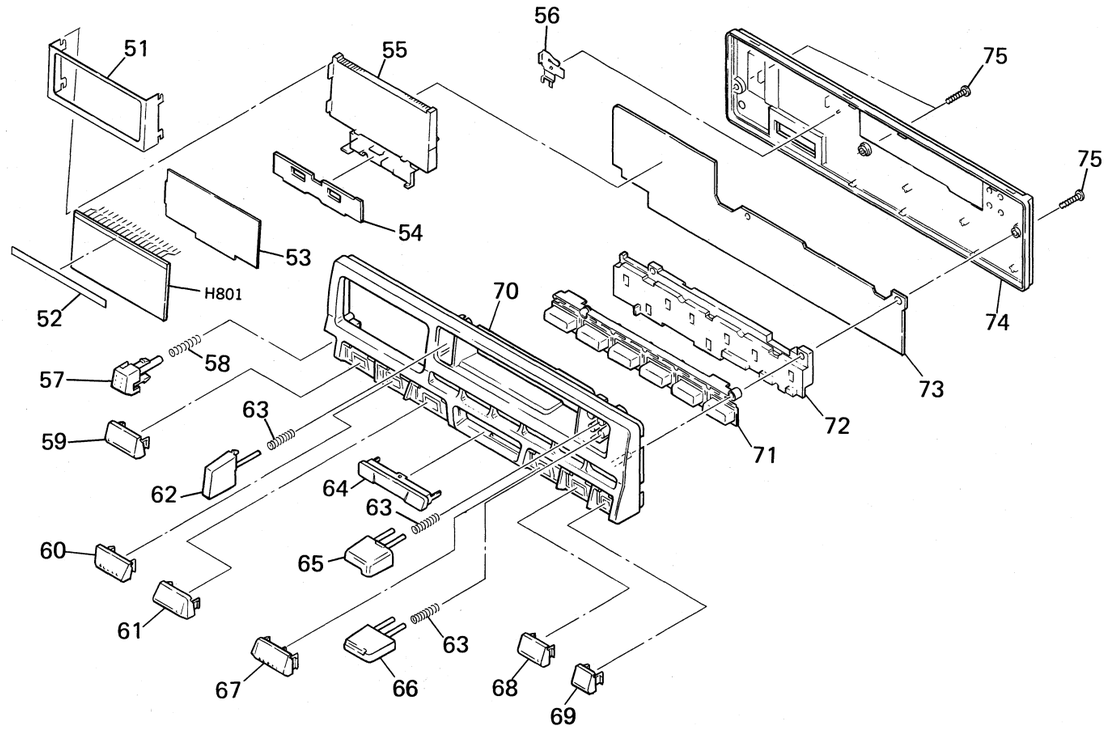
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

4-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-915-460-01	COVER (EJ)	
2	3-915-458-01	COVER (FF)	
3	3-915-459-01	COVER (REW)	
4	3-915-185-01	PANEL, SUB	
5	3-915-199-01	DOOR, CASSETTE (XR-3200)	
5	3-915-199-11	DOOR, CASSETTE (XR-3201)	
5	3-915-199-21	DOOR, CASSETTE (XR-3202)	
5	3-915-199-31	DOOR, CASSETTE (EXR-18)	
6	3-915-720-01	SPRING (C DOOR), TORSION	
7	X-3368-695-1	LOCK ASSY	
* 8	3-915-464-01	COVER (TOP)	
9	3-915-683-01	CLAMP	
10	3-916-055-01	PLATE, LOCK	
11	3-916-056-01	PLATE (R), LOCK	
12	3-916-979-01	SCREW	
* 13	A-3222-811-A	MAIN BOARD, COMPLETE (XR-3200:AEP)	
* 13	A-3222-794-A	MAIN BOARD, COMPLETE (XR-3202)	
* 13	A-3222-795-A	MAIN BOARD, COMPLETE (XR-3201)	
* 13	A-3222-797-A	MAIN BOARD, COMPLETE (XR-3200:US, CND)	
* 13	A-3222-799-A	MAIN BOARD, COMPLETE (EXR-18)	
* 14	3-915-466-01	CUSHION	
15	1-765-563-11	CORD (WITH CONNECTOR) (XR-3200:US, CND)	
15	1-765-563-21	CORD (WITH CONNECTOR) (EXCEPT XR-3200:US, CND)	
* 16	3-915-684-01	HEAT SINK (XR-3200)	
* 17	3-915-682-01	INSULATOR	
* 18	3-915-465-01	COVER (BOTTOM)	
19	3-916-973-01	SCREW (+BTT) (2.6X6)	
* 20	X-3368-669-1	CHASSIS ASSY	
21	3-916-974-01	SCREW (+BTT) (3X10)	
22	3-916-975-01	SCREW (+BTT) (2.6X6)	
23	3-916-976-01	SCREW (+BTT) (2.6X5)	
24	3-916-977-01	SCREW (+BTT) (3,6X6X6)	
25	3-916-978-01	SCREW (+BTT) (2.6X7X8)	
ET201	A-3222-812-A	FM/AM TUNER UNIT (RF19-2N) (XR-3200:AEP/3202)	
ET201	A-3222-796-A	FM/AM TUNER UNIT (RF22-3N) (XR-3201)	
ET201	A-3222-798-A	FM/AM TUNER UNIT (RF19-2) (US, CND)	
F901	1-532-419-00	FUSE (3.15A)	

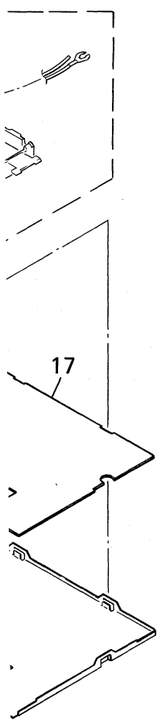
4-2. FRONT PANEL SECTION



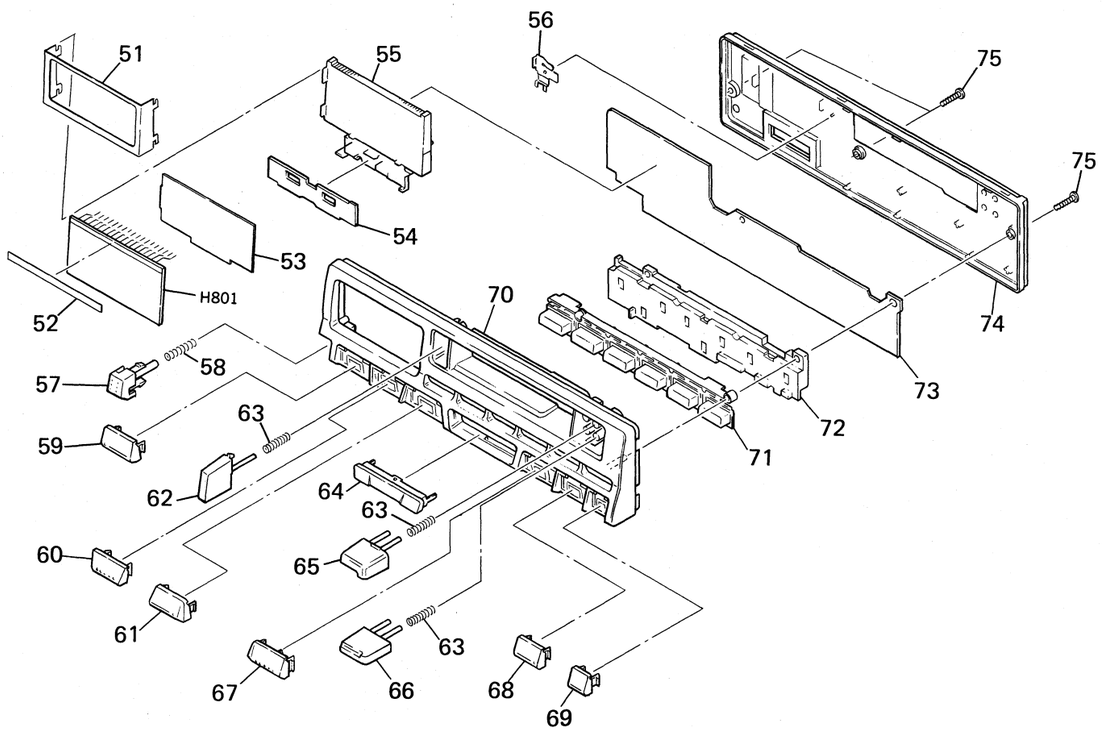
Ref. No.	Part No.	Description	Remark
* 51	3-915-685-01	PLATE (LCD), GROUND	
* 52	3-915-687-01	INSULATOR (LCD)	
* 53	3-915-686-01	SHEET, COLOR	
* 54	1-653-194-11	SUB KEY BOARD	
* 55	3-915-457-01	PLATE (LCD), LIGHT GUIDE	
56	3-915-681-01	PLATE (F-S), GROUND	
57	3-915-186-01	BUTTON (RELEASE)	
58	3-915-718-01	SPRING (RELEASE)	
59	3-915-187-01	BUTTON (-)	
60	3-915-188-01	BUTTON (SEL)	
61	3-915-189-01	BUTTON (+)	
62	X-3368-694-1	BUTTON (EJECT) ASSY	
63	3-915-719-01	SPRING (EJ. FF. REW)	
64	3-915-190-01	BUTTON (SEEK)	
65	3-915-196-01	BUTTON (FF)	
66	3-915-197-01	BUTTON (REW)	
67	3-915-191-01	BUTTON (TUNER)	
68	3-915-192-01	BUTTON (SENS) (EXCEPT XR-3202)	
68	3-915-193-01	BUTTON (SDK) (XR-3202)	
69	3-915-194-01	BUTTON (OFF)	
70	3-915-184-01	PANEL, FRONT (XR-3200)	
70	3-915-184-11	PANEL, FRONT (XR-3201)	
70	3-915-184-21	PANEL, FRONT (XR-3202)	
70	3-915-184-31	PANEL, FRONT (EXR-18)	
71	3-915-198-01	BUTTON (1-6)	
72	3-915-456-01	PLATE (FP), LIGHT GUIDE	
* 73	A-3298-208-A	KEY BOARD, COMPLETE (GREEN)	
* 73	A-3298-213-A	KEY BOARD, COMPLETE (AMBER)	
74	3-915-454-01	PANEL, FRONT BACK	
75	3-916-981-11	SCREW (+B) (2X8)	
H801	1-810-568-11	DISPLAY PANLE, LIQUID CRYSTAL	

Ref. No.
101
102
103
104
* 105
* 106
107
108
109
110

on
dian model

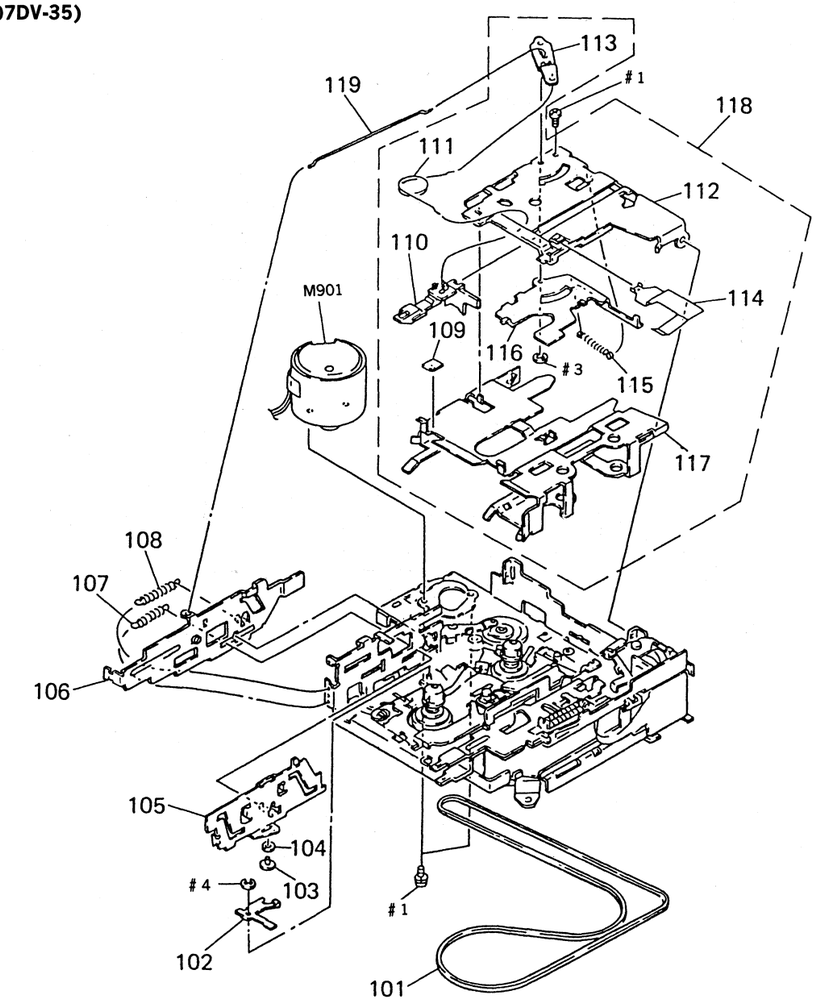


4-2. FRONT PANEL SECTION



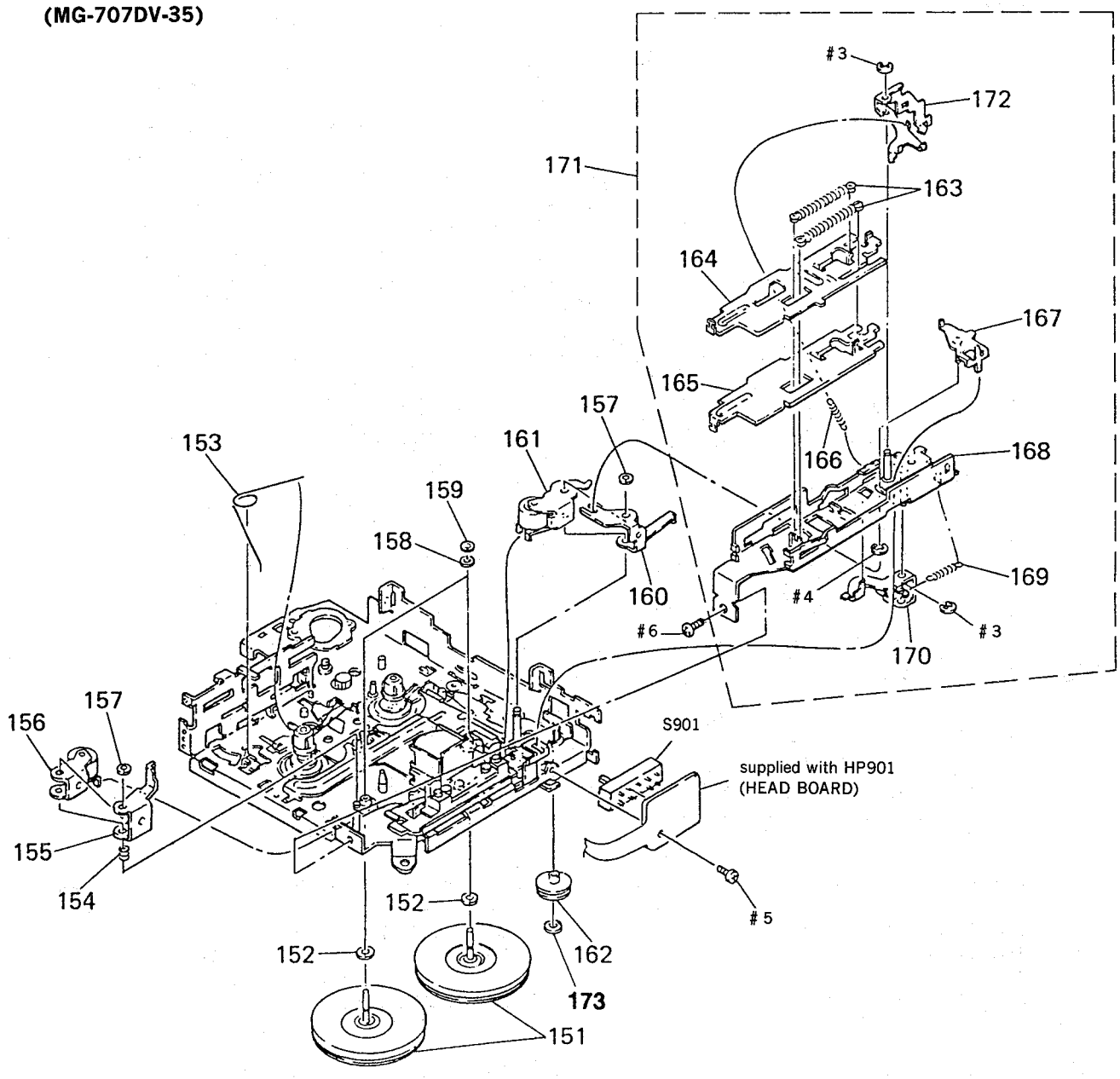
Ref. No.	Part No.	Description	Remark
* 51	3-915-685-01	PLATE (LCD), GROUND	
* 52	3-915-687-01	INSULATOR (LCD)	
* 53	3-915-686-01	SHEET, COLOR	
* 54	1-653-194-11	SUB KEY BOARD	
* 55	3-915-457-01	PLATE (LCD), LIGHT GUIDE	
56	3-915-681-01	PLATE (F-S), GROUND	
57	3-915-186-01	BUTTON (RELEASE)	
58	3-915-718-01	SPRING (RELEASE)	
59	3-915-187-01	BUTTON (-)	
60	3-915-188-01	BUTTON (SEL)	
61	3-915-189-01	BUTTON (+)	
62	X-3368-694-1	BUTTON (EJECT) ASSY	
63	3-915-719-01	SPRING (EJ. FF. REW)	
64	3-915-190-01	BUTTON (SEEK)	
65	3-915-196-01	BUTTON (FF)	
66	3-915-197-01	BUTTON (REW)	
67	3-915-191-01	BUTTON (TUNER)	
68	3-915-192-01	BUTTON (SENS) (EXCEPT XR-3202)	
68	3-915-193-01	BUTTON (SDK) (XR-3202)	
69	3-915-194-01	BUTTON (OFF)	
70	3-915-184-01	PANEL, FRONT (XR-3200)	
70	3-915-184-11	PANEL, FRONT (XR-3201)	
70	3-915-184-21	PANEL, FRONT (XR-3202)	
70	3-915-184-31	PANEL, FRONT (EXR-18)	
71	3-915-198-01	BUTTON (1-6)	
72	3-915-456-01	PLATE (FP), LIGHT GUIDE	
* 73	A-3298-208-A	KEY BOARD, COMPLETE (GREEN)	
* 73	A-3298-213-A	KEY BOARD, COMPLETE (AMBER)	
74	3-915-454-01	PANEL, FRONT BACK	
75	3-916-981-11	SCREW (+B) (2X8)	
H801	1-810-568-11	DISPLAY PANLE, LIQUID CRYSTAL	

4-3. MECHANISM DECK SECTION 1 (MG-707DV-35)



Ref. No.	Part No.	Description	Remark
101	3-367-284-01	BELT, MAIN	
102	3-367-313-01	ARM, H. P PUSH	
103	3-367-264-01	ROLLER (A), H. P	
104	3-367-265-01	ROLLER (B), H. P	
* 105	3-367-311-01	PLATE (M), PUSH, C. H	
* 106	3-915-552-01	LEVER (M), PUSH	
107	3-367-267-01	SPRING, C. H	
108	3-367-268-01	SPRING, PUSH LEVER	
109	3-367-254-01	RUBBER, CUSHION	
110	3-367-258-01	SLIDER (C), PACK	
111	3-367-255-01	SPRING (C), REVERSE	
* 112	3-367-251-01	LIFTER, CASE	
* 113	3-367-252-01	RIVETING ASSY, P. E PLATE	
* 114	3-367-259-01	SPRING, PACK RETAINER	
115	3-367-253-01	SPRING, C. D	
* 116	3-367-257-01	PLATE (B), C. D	
* 117	3-367-256-01	CASE (M), CASSETTE	
118	X-3362-789-2	CASSETTE CASE ASSY	
119	3-367-260-01	SPRING, P. E	
M901	3-367-276-01	MOTOR ASSY	

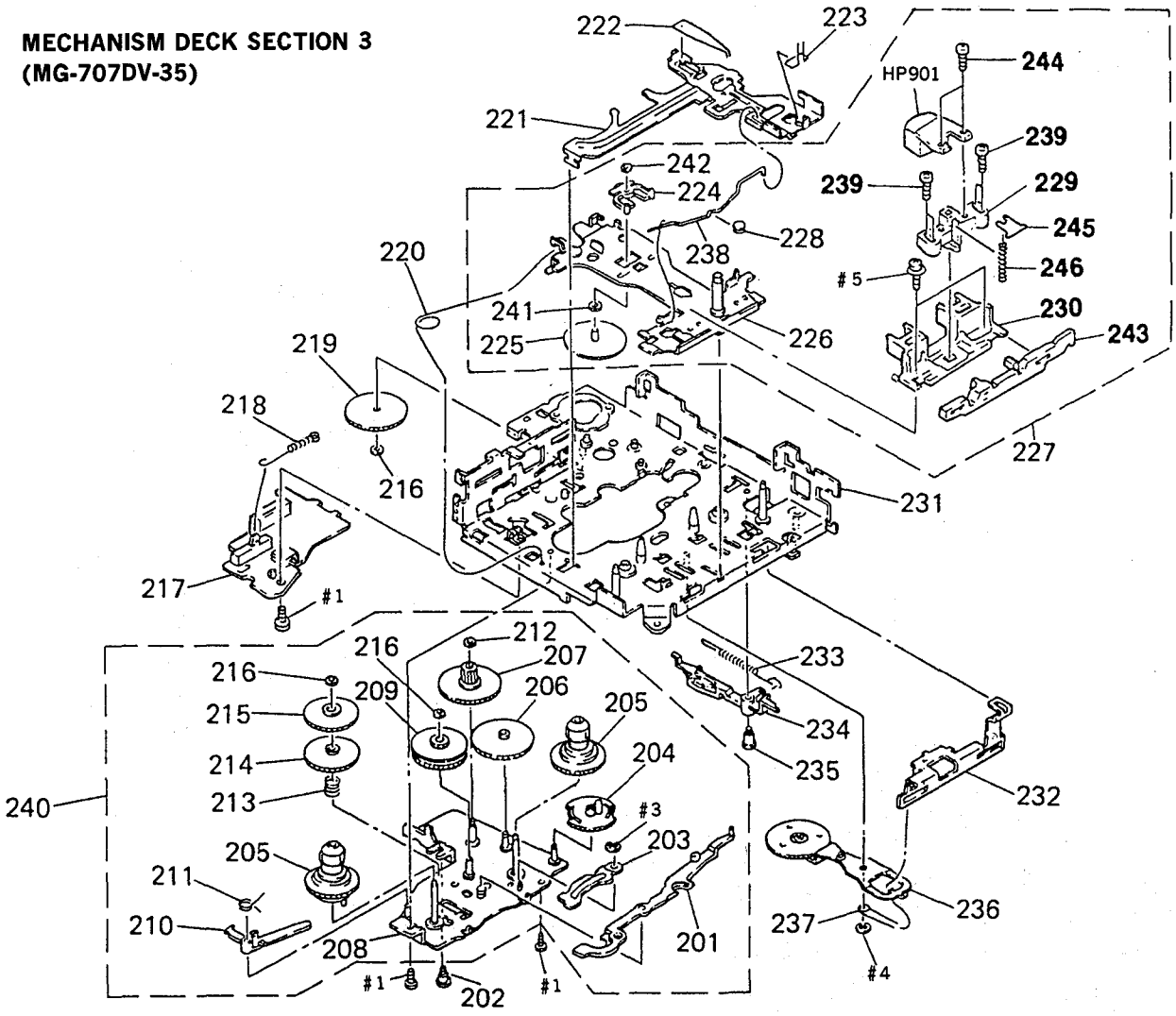
4-4. MECHANISM DECK SECTION 2 (MG-707DV-35)



Ref. No.	Part No.	Description	Remark
151	3-367-283-01	RIVETING ASSY, F.L CAPSTAN	
152	3-701-437-01	WASHER	
153	3-367-314-01	SPRING (M), HEAD PANEL	
154	3-367-285-01	SPRING, P.P	
* 155	3-367-296-01	ARM, H.P RETURN	
156	3-367-232-01	ARM (R) ASSY, PINCH ROLLER	
157	3-676-387-00	POLY-SLIDER (DIA. 1.6)	
158	3-315-495-41	WASHER	
159	3-592-680-00	WASHER (C), POLYETHYLENE	
* 160	3-367-292-01	PLATE, FUNCTION, SEESAW	
161	3-367-231-01	ARM (F) ASSY, PINCH ROLLER	
162	3-367-287-01	PULLEY, MIDWAY	

Ref. No.	Part No.	Description	Remark
163	3-367-298-01	SPRING, F.R LEVER	
* 164	3-915-553-01	LEVER (M.H), FF	
* 165	3-915-554-01	LEVER (M.H), REW	
166	3-367-304-01	SPRING (M), LOCK PLATE	
* 167	3-367-234-01	RIVETING ASSY, SEESAW PLATE (M)	
* 168	3-367-233-01	RIVETING ASSY, F.R BRACKET (M)	
169	3-367-302-01	SPRING, P.C	
* 170	3-367-301-01	PLATE, P.C	
171	X-3365-724-1	R.F LEVER ASSY	
* 172	3-367-303-01	LOCK PLATE (M)	
173	3-321-393-11	WASHER, STOPPER	
S901	1-572-712-11	SWITCH, SLIDE (FWD/REV)	

4-5. MECHANISM DECK SECTION 3 (MG-707DV-35)



Ref. No.	Part No.	Description	Remark
201	3-367-241-01	PLATE (B), E.D	
202	3-367-295-01	SCREW (P), COLOR	
* 203	3-367-245-01	PLATE, LIFTUP	
204	3-367-240-01	GEAR (M), REVERSE	
205	3-383-370-01	REEL ASSY, T	
206	3-367-239-01	GEAR, E.D	
207	3-367-238-01	GEAR, P.D	
* 208	3-367-242-01	RIVETING ASSY, M.G PLATE	
209	3-367-244-01	CLUTCH ASSY, P	
210	3-367-246-01	ARM, REVERSE PREVENTION	
211	3-367-247-01	SPRING	
212	3-676-387-00	POLY-SLIDER (DIA.1.6)	
213	3-367-243-01	SPRING, T.N	
214	3-367-237-01	GEAR (R), F	
215	3-367-236-01	GEAR (R), P	
216	3-318-236-01	WASHER, POLY, SLIT	
217	3-383-371-01	SWITCH ASSY, POWER (S902, S903)	
218	3-367-293-01	SPRING, POWER SWITCH	
219	3-370-853-02	GEAR (V), MAIN	
220	3-367-314-01	SPRING (M), HEAD PANEL	
* 221	3-367-272-01	PLATE, MAIN	
222	3-367-273-01	SPRING, M.S	
223	3-367-274-01	SPRING, H.S	
224	3-367-226-01	METAL, P. GEAR	

Ref. No.	Part No.	Description	Remark
225	3-367-227-01	GEAR, P	
* 226	3-383-367-01	RIVETING ASSY, HEAD PANEL	
227	X-3365-722-1	HEAD PANEL ASSY	
228	3-367-224-01	ROLLER, SP	
229	3-383-374-01	HOLDER (B), HEAD	
* 230	3-383-373-01	GUIDE (U), TAPE	
231	3-375-374-01	RIVETING ASSY, CHASSIS	
* 232	3-367-294-01	PLATE (M), F.R SLIDE	
233	3-367-297-01	SPRING (C), T.A	
234	3-367-289-01	ARM (C), TRIGGER	
235	3-367-290-01	SCREW (T), COLOR	
236	X-3362-791-2	F.R WORKING ASSY	
237	3-367-282-01	SPRING (M), F.R	
238	3-367-225-01	SPRING, P.R	
239	3-383-375-01	SCREW, ADJUSTMENT	
240	X-3365-723-1	M.G PLATE ASSY	
241	3-701-447-11	WASHER, 10	
242	3-579-788-01	WASHER, STOPPER	
* 243	3-383-376-01	PLATE (B), SHIFT	
244	3-383-372-01	SCREW, FIX	
245	3-383-369-01	WASHER, FASTEN	
246	3-383-368-01	SPRING, H.G	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	

SECTION 5
ELECTRICAL PARTS LIST

KEY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

- Abbreviation
  CND : Canadian model

Ref.No.	Part No.	Description			Remark
*	A-3298-208-A	KEY BOARD, COMPLETE (GREEN)			
*	A-3298-213-A	KEY BOARD, COMPLETE (AMBER)			
		**********			
*	3-915-457-01	PLATE (LCD), LIGHT GUIDE			
*	3-915-685-01	PLATE (LCD), GROUND			
*	3-915-686-01	SHEET, COLOR			
*	3-915-687-01	INSULATOR (LCD)			
		< CAPACITOR >			
C801	1-164-004-11	CERAMIC CHIP	0.1uF	10% 25V	
C802	1-163-137-00	CERAMIC CHIP	680PF	5% 50V	
		< DIODE >			
D801	8-719-025-31	DIODE	02CZ5.6-TE85L		
D802	8-719-025-31	DIODE	02CZ5.6-TE85L		
D803	8-719-025-31	DIODE	02CZ5.6-TE85L		
D804	8-719-025-31	DIODE	02CZ5.6-TE85L		
D805	8-719-043-82	DIODE	02CZ5.1Y-TE85L		
		< LIQUID CRYSTAL DISPLAY >			
H801	1-810-568-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< IC >			
IC801	8-759-171-25	IC	LC7582E		
		< JUMPER RESISTOR >			
J802	1-216-296-00	METAL CHIP	0	5% 1/8W	
J803	1-216-296-00	METAL CHIP	0	5% 1/8W	
		< CONNECTOR >			
P801	1-764-423-11	PIN, CONNECTOR 12P			
		< PILOT LAMP >			
PL801-803	1-517-330-11	LAMP, PILOT (GREEN)			
PL801-803	1-517-331-11	LAMP, PILOT (AMBER)			
PL805	1-517-330-11	LAMP, PILOT (GREEN)			
PL805	1-517-331-11	LAMP, PILOT (AMBER)			
PL806	1-517-330-11	LAMP, PILOT (GREEN)			
PL806	1-517-331-11	LAMP, PILOT (AMBER)			
		< RESISTOR >			
R801-803	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R804	1-216-081-00	METAL CHIP	22K	5% 1/10W	
R805	1-216-057-00	METAL CHIP	2.2K	5% 1/10W	
R806	1-216-049-00	METAL CHIP	1K	5% 1/10W	
R807	1-216-091-00	METAL CHIP	56K	5% 1/10W	
R811-814	1-216-011-00	METAL CHIP	27	5% 1/10W	
R841	1-216-062-00	METAL CHIP	3.6K	5% 1/10W	
R842	1-216-066-00	METAL CHIP	5.1K	5% 1/10W	
R843	1-216-070-00	METAL CHIP	7.5K	5% 1/10W	
R844	1-216-076-00	METAL CHIP	13K	5% 1/10W	
		< SWITCH >			
SW801	1-554-980-31	SWITCH, KEY BOARD (1/ATA)			
SW802	1-554-980-31	SWITCH, KEY BOARD (2)			
SW803	1-554-980-31	SWITCH, KEY BOARD (3)			
SW804	1-554-980-31	SWITCH, KEY BOARD (4)			
SW805	1-554-980-31	SWITCH, KEY BOARD (5)			
SW806	1-554-980-31	SWITCH, KEY BOARD (SEEK/MANU -)			
SW807	1-554-980-31	SWITCH, KEY BOARD (SEEK/MANU +)			
SW808	1-554-813-41	SWITCH, KEY BOARD (TUNER/A.MEM)			
SW809	1-554-813-41	SWITCH, KEY BOARD (SEEK/LOUD) (EXCEPT XR-3202)			
SW809	1-554-813-41	SWITCH, KEY BOARD (SDK) (XR-3202)			
SW810	1-554-980-31	SWITCH, KEY BOARD (6)			
SW811	1-554-813-41	SWITCH, KEY BOARD (OFF)			
SW812	1-554-813-41	SWITCH, KEY BOARD (VOL +)			
**********					

MAIN

Ref. No.	Part No.	Description			Remark
*	A-3222-811-A	MAIN BOARD, COMPLETE (XR-3200:AEP)			
*	A-3222-794-A	MAIN BOARD, COMPLETE (XR-3202)			
*	A-3222-795-A	MAIN BOARD, COMPLETE (XR-3201)			
*	A-3222-797-A	MAIN BOARD, COMPLETE (XR-3200:US, CND)			
*	A-3222-799-A	MAIN BOARD, COMPLETE (EXR-18)			
		**********			
*	3-915-466-01	CUSHION			
*	3-915-684-01	HEAT SINK			
		< CAPACITOR >			
C201	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C202	1-124-584-00	ELECT	100uF	20%	10V
C203	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C204	1-163-037-11	CERAMIC CHIP (EXCEPT US, CND)	0.022uF	10%	25V
C204	1-163-989-11	CERAMIC CHIP (US, CND)	0.033uF	10%	25V
C205	1-163-037-11	CERAMIC CHIP (EXCEPT US, CND)	0.022uF	10%	25V
C205	1-163-989-11	CERAMIC CHIP (US, CND)	0.033uF	10%	25V
C206	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C251	1-163-239-11	CERAMIC CHIP (XR-3202)	33PF	5%	50V
C252	1-164-004-11	CERAMIC CHIP (XR-3202)	0.1uF	10%	25V
C253	1-136-163-00	FILM (XR-3202)	0.068uF	5%	50V
C254	1-136-163-00	FILM (XR-3202)	0.068uF	5%	50V
C255	1-126-163-11	ELECT (XR-3202)	4.7uF	20%	50V
C256	1-104-683-11	MYLAR (XR-3202)	0.0047uF	5%	50V
C257	1-164-004-11	CERAMIC CHIP (XR-3202)	0.1uF	10%	25V
C258	1-163-986-00	CERAMIC CHIP (XR-3202)	0.027uF	10%	25V
C259	1-163-809-11	CERAMIC CHIP (XR-3202)	0.047uF	10%	25V
C260	1-164-004-11	CERAMIC CHIP (XR-3202)	0.1uF	10%	25V
C261	1-164-004-11	CERAMIC CHIP (XR-3202)	0.1uF	10%	25V
C262	1-126-157-11	ELECT (XR-3202)	10uF	20%	16V
C301	1-126-163-11	ELECT	4.7uF	20%	50V
C302	1-126-163-11	ELECT	4.7uF	20%	50V
C303	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C304	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C305	1-124-589-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description			Remark
C306	1-124-589-11	ELECT	47uF	20%	16V
C307	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C308	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C309	1-126-157-11	ELECT	10uF	20%	16V
C401	1-124-257-00	ELECT	2.2uF	20%	50V
C402	1-124-257-00	ELECT	2.2uF	20%	50V
C403	1-126-157-11	ELECT	10uF	20%	16V
C404	1-124-234-00	ELECT	22uF	20%	16V
C405	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C406	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C407	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C408	1-124-257-00	ELECT	2.2uF	20%	50V
C409	1-124-464-11	ELECT	0.22uF	20%	50V
C410	1-124-464-11	ELECT	0.22uF	20%	50V
C411	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C412	1-124-257-00	ELECT	2.2uF	20%	50V
C413	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C414	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C415	1-126-163-11	ELECT	4.7uF	20%	50V
C416	1-126-163-11	ELECT	4.7uF	20%	50V
C481	1-126-157-11	ELECT (US, CND)	10uF	20%	16V
C482	1-126-157-11	ELECT (US, CND)	10uF	20%	16V
C483	1-126-163-11	ELECT (US, CND)	4.7uF	20%	50V
C484	1-126-163-11	ELECT (US, CND)	4.7uF	20%	50V
C501-504	1-124-257-00	ELECT	2.2uF	20%	50V
C505	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C506	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C507	1-124-584-00	ELECT	100uF	20%	10V
C508	1-124-589-11	ELECT	47uF	20%	16V
C509	1-126-952-11	ELECT	1000uF	20%	16V
C510	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C511	1-163-133-11	CERAMIC CHIP	470PF	5%	50V
C551-554	1-124-257-00	ELECT	2.2uF	20%	50V
C601	1-126-949-11	ELECT	220uF	20%	10V
C602	1-124-589-11	ELECT	47uF	20%	16V
C604	1-126-952-11	ELECT	1000uF	20%	16V
C605	1-126-952-11	ELECT	1000uF	20%	16V
C606-609	1-163-251-11	CERAMIC CHIP (XR-3202)	100PF	5%	50V
C610	1-164-162-11	CERAMIC CHIP (XR-3202)	100PF	5%	100V
C611	1-164-162-11	CERAMIC CHIP (XR-3202)	100PF	5%	100V

Ref. No.	Part No.	Description			Remark
C612	1-104-665-11	ELECT	100uF	20%	16V
C701	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C702	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C703	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C704	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C706	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C707	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C708	1-126-949-11	ELECT	220uF	20%	10V
C709	1-126-163-11	ELECT	4.7uF	20%	50V
C710	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C711	1-126-157-11	ELECT	10uF	20%	16V
C712	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C713	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C714-716					
	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C718	1-164-232-11	CERAMIC CHIP (XR-3201)	0.01uF		50V
C719	1-126-157-11	ELECT	10uF	20%	16V
		< DIODE >			
D202	8-719-901-33	DIODE 1SS133			
D203	8-719-901-33	DIODE 1SS133			
D301	8-719-982-10	DIODE MTZJ-4.3A			
D302	8-719-901-33	DIODE 1SS133			
D303	8-719-901-33	DIODE 1SS133			
D501	8-719-901-33	DIODE 1SS133			
D506	8-719-901-33	DIODE 1SS133			
D601	8-719-109-89	DIODE RD5.6ESB2			
D602	8-719-110-14	DIODE RD9.1ESB3			
D606	8-719-032-29	DIODE 1SS145			
D607	8-719-984-80	DIODE 1SR139-200			
D608	8-719-984-80	DIODE 1SR139-200			
D609	8-719-032-29	DIODE 1SS145			
D610	8-719-901-33	DIODE 1SS133			
D611	8-719-032-29	DIODE 1SS145			
D701	8-719-901-33	DIODE 1SS133			
D704	8-719-901-33	DIODE 1SS133 (XR-3202)			
D705	8-719-901-33	DIODE 1SS133 (XR-3201)			
D709	8-719-109-97	DIODE RD6.8ESB2			
D710	8-719-921-50	DIODE MTZJ-6.2A			
D711	8-719-921-50	DIODE MTZJ-6.2A			
D712	8-719-921-50	DIODE MTZJ-6.2A			
D713	8-719-921-50	DIODE MTZJ-6.2A			
D714	8-719-921-50	DIODE MTZJ-6.2A			
D715	8-719-921-50	DIODE MTZJ-6.2A			
D716	8-719-921-50	DIODE MTZJ-6.2A			
D717	8-719-921-50	DIODE MTZJ-6.2A			
D718	8-719-901-33	DIODE 1SS133			
D719	8-719-901-33	DIODE 1SS133 (US, CND)			

Ref. No.	Part No.	Description			Remark
D720	8-719-110-14	DIODE RD9.1ESB3			
		< TUNER UNIT >			
ET201	A-3222-812-A	FM/AM TUNER UNIT (RF19-2N) (XR-3200:AEP/3202)			
ET201	A-3222-796-A	FM/AM TUNER UNIT (RF-22-3N) (XR-3201)			
ET201	A-3222-798-A	FM/AM TUNER UNIT (RF19-2) (US, CND)			
		< VIBRATOR >			
F701	1-567-713-31	VIBRATOR, CRYSTAL (4.5MHz)			
		< IC >			
IC251	8-759-971-69	IC TDA1579 (XR-3202)			
IC301	8-759-106-02	IC uPC4570G2			
IC401	8-759-161-19	IC TDA7314S			
IC481	8-759-909-71	IC BA4558F (US, CND)			
IC501	8-759-248-34	IC TDA1558Q			
IC701	8-759-279-57	IC LC7233N-8861			
		< JUMPER RESISTOR >			
J421	1-216-296-00	METAL CHIP (US, CND)	0	5%	1/8W
J701	1-216-296-00	METAL CHIP	0	5%	1/8W
J702	1-216-296-00	METAL CHIP (US, CND)	0	5%	1/8W
J901	1-216-296-00	METAL CHIP	0	5%	1/8W
J902	1-216-296-00	METAL CHIP	0	5%	1/8W
J903	1-216-296-00	METAL CHIP	0	5%	1/8W
J904	1-216-296-00	METAL CHIP	0	5%	1/8W
J905	1-216-296-00	METAL CHIP	0	5%	1/8W
J906	1-216-296-00	METAL CHIP	0	5%	1/8W
J907	1-216-296-00	METAL CHIP	0	5%	1/8W
J908	1-216-296-00	METAL CHIP	0	5%	1/8W
J909	1-216-296-00	METAL CHIP	0	5%	1/8W
J910	1-216-296-00	METAL CHIP	0	5%	1/8W
J911	1-216-296-00	METAL CHIP	0	5%	1/8W
		< COIL >			
L251	1-409-768-11	COIL (FILTER) (XR-3202)			
L701	1-410-513-11	INDUCTOR 22uH			
		< CONNECTOR >			
* P301	1-695-107-11	PIN, CONNECTOR (PC BOARD) 5P			
P701	1-764-422-11	PLUG, CONNECTOR 12P			

MAIN

Ref. No.	Part No.	Description	Remark
		< TRANSISTOR >	
Q201	8-729-901-00	TRANSISTOR DTC124EK	
Q202	8-729-901-00	TRANSISTOR DTC124EK	
Q301	8-729-925-67	TRANSISTOR DTB123YS	
Q302	8-729-901-00	TRANSISTOR DTC124EK	
Q303	8-729-901-00	TRANSISTOR DTC124EK	
Q304	8-729-901-00	TRANSISTOR DTC124EK	
Q421	8-729-901-00	TRANSISTOR DTC124EK	(US, CND)
Q422	8-729-901-04	TRANSISTOR DTA114EK	(US, CND)
Q481	8-729-900-98	TRANSISTOR DTC143TK	(US, CND)
Q482	8-729-900-98	TRANSISTOR DTC143TK	(US, CND)
Q506	8-729-925-67	TRANSISTOR DTB123YS	
Q507	8-729-901-00	TRANSISTOR DTC124EK	
Q601	8-729-107-78	TRANSISTOR 2SC3623-K	
Q602	8-729-931-10	TRANSISTOR 2SD1858-P	
Q603	8-729-207-63	TRANSISTOR 2SB1326-TV2	
Q604	8-729-901-00	TRANSISTOR DTC124EK	
Q701	8-729-901-00	TRANSISTOR DTC124EK	
Q702	8-729-901-00	TRANSISTOR DTC124EK	
Q703	8-729-901-00	TRANSISTOR DTC124EK	
Q704	8-729-422-29	TRANSISTOR 2SD601A-S	
Q705	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q706	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R201	1-216-073-00	METAL CHIP 10K 5%	1/10W
R204	1-216-081-00	METAL CHIP 22K 5%	1/10W
R205	1-216-073-00	METAL CHIP 10K 5% (XR-3201)	1/10W
R207	1-216-061-00	METAL CHIP 3.3K 5% (XR-3201)	1/10W
R207	1-216-079-00	METAL CHIP 18K 5% (EXCEPT XR-3201)	1/10W
R208	1-216-061-00	METAL CHIP 3.3K 5% (XR-3201)	1/10W
R208	1-216-079-00	METAL CHIP 18K 5% (EXCEPT XR-3201)	1/10W
R209	1-216-097-00	METAL CHIP 100K 5% (XR-3202)	1/10W
R211	1-216-079-00	METAL CHIP 18K 5% (XR-3202)	1/10W
R211	1-216-085-00	METAL CHIP 33K 5% (XR-3200:AEP/3201)	1/10W
R211	1-216-091-00	METAL CHIP 56K 5% (US, CND)	1/10W
R251	1-228-989-00	RES, ADJ, METAL 470	(XR-3202)
R252	1-216-035-00	METAL CHIP 270 5% (XR-3202)	1/10W
R253	1-216-089-00	METAL CHIP 47K 5% (XR-3202)	1/10W

Ref. No.	Part No.	Description	Remark
R255	1-216-105-00	METAL CHIP 220K 5% (XR-3202)	1/10W
R256	1-216-117-00	METAL CHIP 680K 5% (XR-3202)	1/10W
R257	1-228-997-00	RES, ADJ, METAL 100K	(XR-3202)
R258	1-216-049-00	METAL CHIP 1K 5% (XR-3202)	1/10W
R259	1-216-093-00	METAL CHIP 68K 5% (XR-3202)	1/10W
R260	1-216-117-00	METAL CHIP 680K 5% (XR-3202)	1/10W
R261	1-216-097-00	METAL CHIP 100K 5% (XR-3202)	1/10W
R262	1-216-085-00	METAL CHIP 33K 5% (XR-3202)	1/10W
R301	1-216-089-00	METAL CHIP 47K 5%	1/10W
R302	1-216-089-00	METAL CHIP 47K 5%	1/10W
R303	1-216-025-00	METAL CHIP 100 5%	1/10W
R304	1-216-025-00	METAL CHIP 100 5%	1/10W
R305	1-216-109-00	METAL CHIP 330K 5%	1/10W
R306	1-216-109-00	METAL CHIP 330K 5%	1/10W
R307	1-216-077-00	METAL CHIP 15K 5%	1/10W
R308	1-216-077-00	METAL CHIP 15K 5%	1/10W
R309	1-216-049-00	METAL CHIP 1K 5%	1/10W
R310	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R311	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R401	1-216-085-00	METAL CHIP 33K 5%	1/10W
R402	1-216-085-00	METAL CHIP 33K 5%	1/10W
R403	1-216-073-00	METAL CHIP 10K 5%	1/10W
R404	1-216-073-00	METAL CHIP 10K 5%	1/10W
R405	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R406	1-216-037-00	METAL CHIP 330 5%	1/10W
R407	1-216-037-00	METAL CHIP 330 5%	1/10W
R408	1-216-057-00	METAL CHIP 2.2K 5%	1/10W
R409	1-216-081-00	METAL CHIP 22K 5%	1/10W
R410	1-216-081-00	METAL CHIP 22K 5%	1/10W
R411	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R412	1-216-069-00	METAL CHIP 6.8K 5%	1/10W
R481	1-216-073-00	METAL CHIP 10K 5% (US, CND)	1/10W
R482	1-216-073-00	METAL CHIP 10K 5% (US, CND)	1/10W
R483	1-216-079-00	METAL CHIP 18K 5% (US, CND)	1/10W
R484	1-216-079-00	METAL CHIP 18K 5% (US, CND)	1/10W
R485	1-216-081-00	METAL CHIP 22K 5% (US, CND)	1/10W
R486	1-216-081-00	METAL CHIP 22K 5% (US, CND)	1/10W

Ref. No.	Part No.	Description			Remark
R487	1-216-049-00	METAL CHIP (US, CND)	1K	5%	1/10W
R488	1-216-049-00	METAL CHIP (US, CND)	1K	5%	1/10W
R501-504					
	1-216-073-00	METAL CHIP	10K	5%	1/10W
R505-508					
	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R509	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R511	1-216-105-00	METAL CHIP	220K	5%	1/10W
R512	1-216-097-00	METAL CHIP	100K	5%	1/10W
R601	1-216-025-00	METAL CHIP	100	5%	1/10W
R602	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R603	1-216-041-00	METAL CHIP	470	5%	1/10W
R604	1-216-043-00	METAL CHIP	560	5%	1/10W
R605	1-216-081-00	METAL CHIP	22K	5%	1/10W
R606	1-247-747-11	CARBON	470	5%	1/2W
R607	1-809-148-11	THERMISTOR, POSITIVE	2.2		
R611	1-216-089-00	METAL CHIP	47K	5%	1/10W
R612	1-216-049-00	METAL CHIP	1K	5%	1/10W
R613	1-216-049-00	METAL CHIP	1K	5%	1/10W
R614	1-216-033-00	METAL CHIP	220	5%	1/10W
R701	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R702	1-216-073-00	METAL CHIP	10K	5%	1/10W
R703	1-216-085-00	METAL CHIP	33K	5%	1/10W
R704	1-216-085-00	METAL CHIP	33K	5%	1/10W
R705	1-216-089-00	METAL CHIP	47K	5%	1/10W
R706	1-216-097-00	METAL CHIP	100K	5%	1/10W
R707	1-216-077-00	METAL CHIP	15K	5%	1/10W
R708	1-216-077-00	METAL CHIP	15K	5%	1/10W
R709	1-216-081-00	METAL CHIP	22K	5%	1/10W
R710	1-216-081-00	METAL CHIP	22K	5%	1/10W
R711	1-216-089-00	METAL CHIP	47K	5%	1/10W
R712	1-216-089-00	METAL CHIP	47K	5%	1/10W
R713	1-216-081-00	METAL CHIP	22K	5%	1/10W
R714	1-216-089-00	METAL CHIP	47K	5%	1/10W
R715	1-216-049-00	METAL CHIP	1K	5%	1/10W
R716	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R717-721					
	1-216-049-00	METAL CHIP	1K	5%	1/10W
R722	1-216-089-00	METAL CHIP	47K	5%	1/10W
R723	1-216-097-00	METAL CHIP	100K	5%	1/10W
R724	1-216-081-00	METAL CHIP	22K	5%	1/10W
R725	1-216-089-00	METAL CHIP	47K	5%	1/10W
R726	1-216-073-00	METAL CHIP	10K	5%	1/10W
R727	1-216-073-00	METAL CHIP	10K	5%	1/10W
R728	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R729	1-216-013-00	METAL CHIP	33	5%	1/10W
R730	1-216-049-00	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description	Remark
*	1-653-194-11	SUB KEY BOARD	
		**********	
		< SWITCH >	
SW851	1-554-813-41	SWITCH, KEY BOARD (SEL) (EXCEPT XR-3202)	
SW851	1-554-813-41	SWITCH, KEY BOARD (SEL/LOUD) (XR-3202)	
SW852	1-554-813-41	SWITCH, KEY BOARD (VOL -)	

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MISCELLANEOUS

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15	1-765-563-11	CORD (WITH CONNECTOR) (XR-3200:US, CND)	
15	1-765-563-21	CORD (WITH CONNECTOR) (EXCEPT XR-3200:US, CND)	
F901	1-532-419-00	FUSE (3.15A)	
HP901	1-543-976-11	HEAD, MAGNETIC (PLAYBACK)	
M901	3-367-276-01	MOTOR ASSY	
S901	1-572-712-11	SWITCH, SLIDE (FWD/REV)	

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HARDWARE LIST

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#1	7-621-255-10	SCREW +P 2X3
#2	7-621-255-40	SCREW +P 2X6
#3	7-624-102-04	STOP RING 1.5, TYPE -E
#4	7-624-104-04	STOP RING 2.0, TYPE -E
#5	7-628-253-05	SCREW +PS 2X4
#6	7-628-253-95	SCREW +PS 2.6X4
#7	7-682-145-01	SCREW +P 3X4

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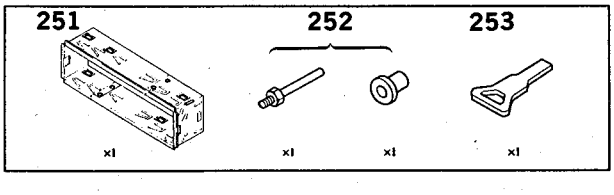
Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-758-689-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, DUTCH) (XR-3200:AEP/3201)	
	3-758-689-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH) (US, CND)	
	3-758-689-41	MANUAL, INSTRUCTION (ITALIAN, SWEDISH, SPANISH, PORTUGUESE) (XR-3200:AEP)	
	3-758-689-51	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-3202)	
	3-758-690-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, DUTCH) (XR-3200:AEP/3201)	
	3-758-690-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US, CND)	
	3-758-690-41	MANUAL, INSTRUCTION, INSTALL (ITALIAN, SWEDISH, SPANISH, PORTUGUESE) (XR-3200:AEP)	
	3-758-690-51	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH, GERMAN, ITALIAN) (XR-3202)	
	3-758-693-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH) (EXR-18)	
	3-758-694-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (EXR-18)	
*	3-913-549-01	INDIVIDUAL CARTON (US, CND)	
*	3-913-550-01	INDIVIDUAL CARTON (XR-3200:AEP)	
*	3-913-551-01	INDIVIDUAL CARTON (XR-3201)	
*	3-913-552-01	INDIVIDUAL CARTON (XR-3202)	
*	3-913-554-01	INDIVIDUAL CARTON (EXR-18)	
*	3-915-466-01	CUSHION	
	X-3368-696-1	CASE ASSY	
**********			
		MOUNTING HARDWARE	
		**********	
* 251	X-3368-734-1	FRAME ASSY, FITTING	
252	X-3366-405-1	SCREW ASSY (EXP), FITTING	
* 253	3-379-363-01	KEY (EXCEPT US, CND)	
253	3-388-078-01	KEY (US, CND)	



English
94D047578-1
Printed in Germany
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Published by Audio Sector Quality Assurance Dept.